

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG _____ ELECTRIC _____ ☒ FILE ☒ WATER SANDS _____ LOCATION _____ SPECTED _____ SUB. REPORT/abd. _____

Operator name change

Converted back to POW 11-21-89

DATE FILED 6-24-85 12-22-85 (UIC application filed)

LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. U-52333 INDIAN

DRILLING APPROVED: 7-3-85 - OIL (Exception Location) 2-26-86 (UIC application approved)

SPUDED IN: 7-24-85

COMPLETED: 9-6-85 PUT TO PRODUCING:

INITIAL PRODUCTION: 460.73 BOPD, 1890 MCF, 34 BWPD

GRAVITY A.P.I. 41.1

GOR: 1907

PRODUCING ZONES: 5504 - 5597 Usman

TOTAL DEPTH: 5825

WELL ELEVATION: 4864.58

DATE ABANDONED:

FIELD: KIVA

UNIT:

COUNTY: SAN JUAN

WELL NO. NAVAJO FEDERAL 4-2

API #43-037-31161

LOCATION 300' FSL FT. FROM (N) (S) LINE, 2225' FSL FT. FROM (E) (W) LINE.

SE SW 1/4 - 1/4 SEC. 4

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
39S	25E	4	MERIDIAN OIL INC.				



5613 DTC Parkway
Englewood, Colorado 80111

June 17, 1985

Board of Oil, Gas and Mining
Department of Natural Resources
State of Utah
4241 State Office Building
Salt Lake City, Utah 84114

RE: REQUEST FOR EXCEPTION LOCATION
NAVAJO FEDERAL #4-2 WELL
Section 4, T39S-R25E
San Juan County, Utah

Gentlemen:

Milestone Petroleum Inc. requests the approval to drill an unorthodox location in Section 4, Township 39 South, Range 25 East, San Juan County, Utah. The Navajo-Federal #4-2 has been staked 300 FSL and 2225 FEL of Section 4.

The reason for this exception location request is based on our interpretation of the algal mounds as indicated on seismic data. The data available indicates that a legal location may be too far north to encounter commercial production. The Navajo Federal #4-2 will test the Upper Ismay and Desert Creek as potentially productive formations. The attached Exhibit "B" is an Upper Ismay Structure Map.

A lease ownership plat is attached as Exhibit "A". Milestone Petroleum Inc. owns 75% of the oil and gas leasehold working interest (Serial #U-52333) within a 600 foot radius of the proposed exception location. BWAB Incorporated owns the remaining 25% interest in Lease #U-52333 and is participating in the drilling of this well. Thus, BWAB, has been notified and is in agreement with this location. No other offset owners are required to be notified since the offset acreage is owned by Milestone and BWAB.

Therefore, this exception location for the Navajo Federal #4-2 is requested in order to encounter the best location for ultimate recovery of oil from this leasehold.

Thank you for your consideration.

Respectfully submitted,

MILESTONE PETROLEUM INC.


William C. Mitchell
District Landman

**APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING**
DATE: 6/17/85
BY: [Signature]

WCM:jb
cc: Don Read, Farmington, C.L. Crawley, Denver
Jed Lemmons, BWAB

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒

GAS
WELL ☐

OTHER

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Milestone Petroleum Inc

3. ADDRESS OF OPERATOR

PO Box 4289, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any applicable regulations.)

At surface

300'S, 2225'E

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

6 miles East of Hatch Trading Post, Utah

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drig. unit line, if any)

300'

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

100'

16. NO. OF ACRES IN LEASE

2920.8

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40.00

19. PROPOSED DEPTH

5845'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

4864' GL

22. APPROX. DATE WORK WILL START*

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48.0#	120'	165 cu.ft.circ.to surface
11"	8 5/8"	24&32#	3000'	1154 cu.ft.circ.to surface
7 7/8"	5 1/2"	15.5#	5845'	531 cu.ft.fill to surf.csg

The Upper Ismay and/or the Desert Creek will be selectively perforated and tested in this well.

A 3000 psi WP and 6000 psi test double gate preventer equipped with blind and pipe rams will be used for blow out prevention on this well.

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 7/3/85
BY: John R. Buge
WELL SPACING: G 3 (C)

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Peggy L. Doak

TITLE

Drilling Clerk

DATE

6-18-85

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

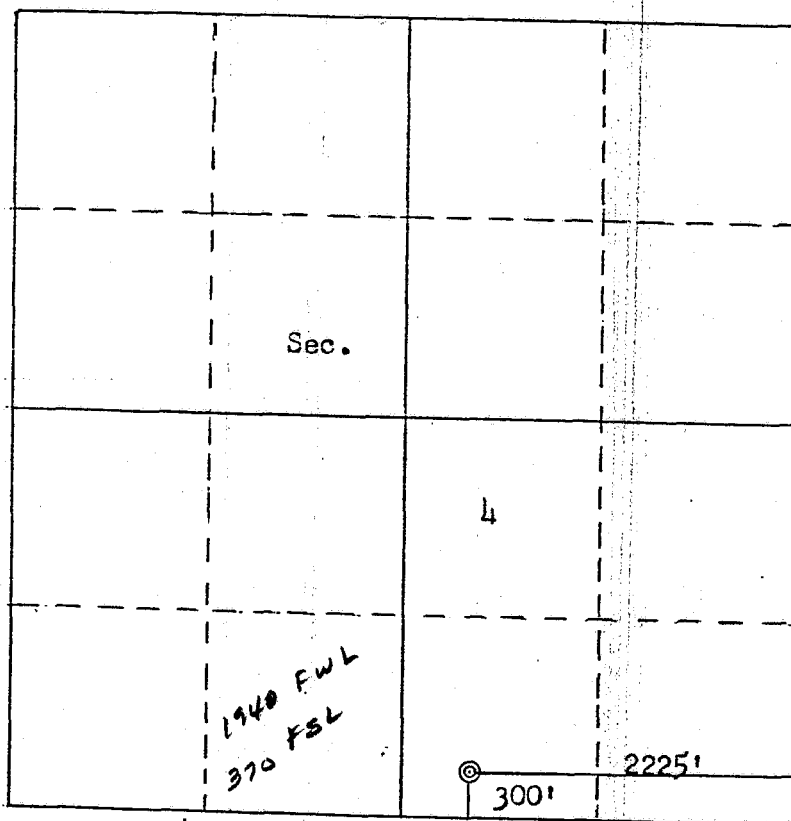
COMPANY MILESTONE PETROLEUM, INCORPORATED

LEASE NAVAJO-FEDERAL WELL NO. 4-2

SEC. 4, T 39S, R 25E

LOCATION 300' FSL 2225' FEL

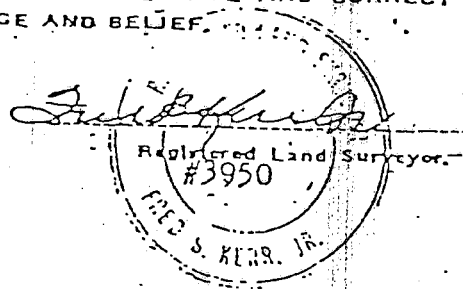
ELEVATION 4864 ungraded ground



SCALE—4 INCHES EQUALS 1 MILE

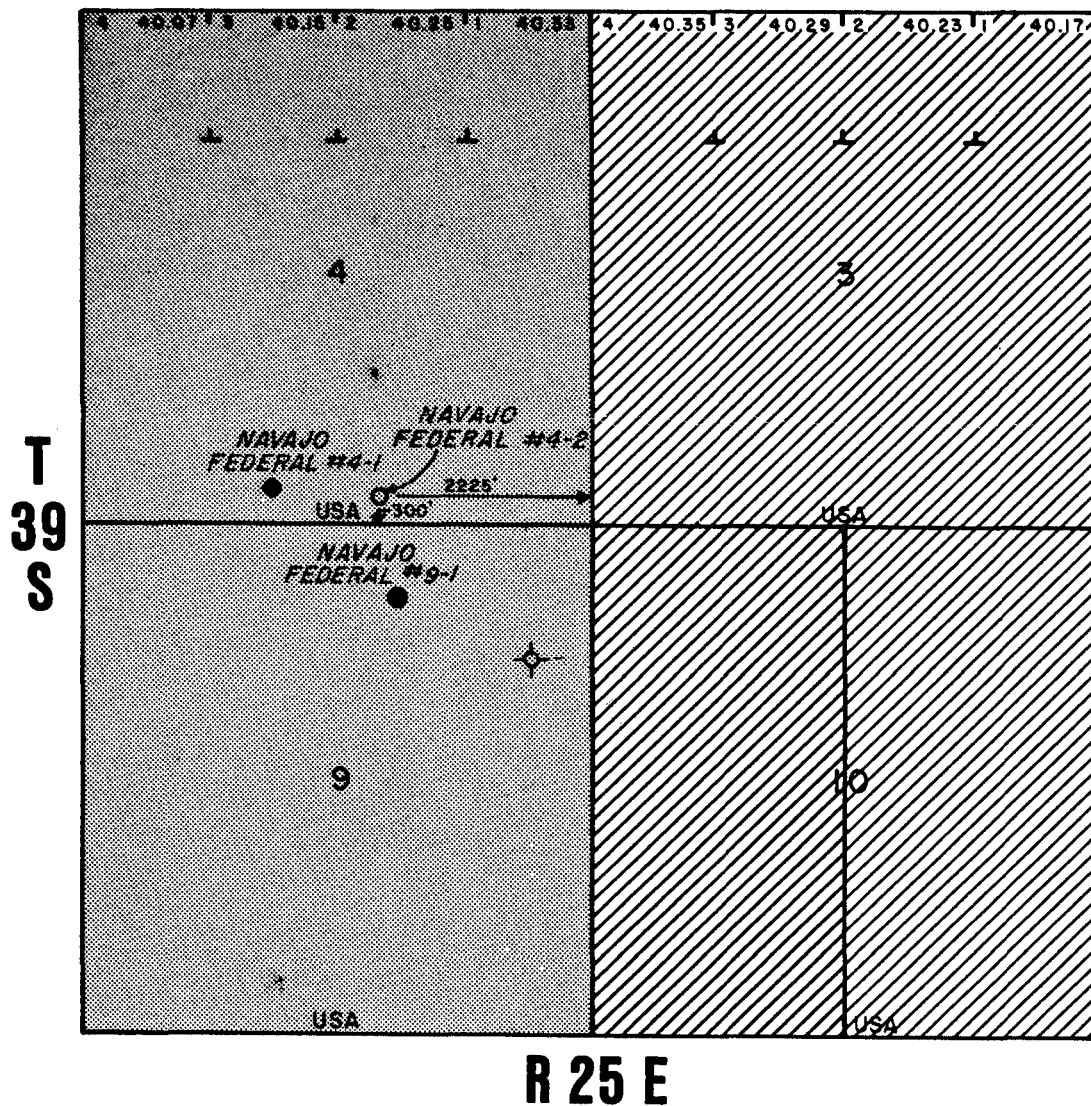
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM
FIELD NOTE OF ACTUAL SURVEYS MADE BY ME UNDER MY SUPER-
VISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE
BEST OF MY KNOWLEDGE AND BELIEF.

SEAL:

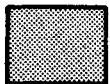


SURVEYED June 17, 1985

EXHIBIT A



KEY: LEASEHOLD OWNERSHIP



MILESTONE PETROLEUM INC. - 75%, BWAB 25%
(FEDERAL SERIAL NO. U-52333)

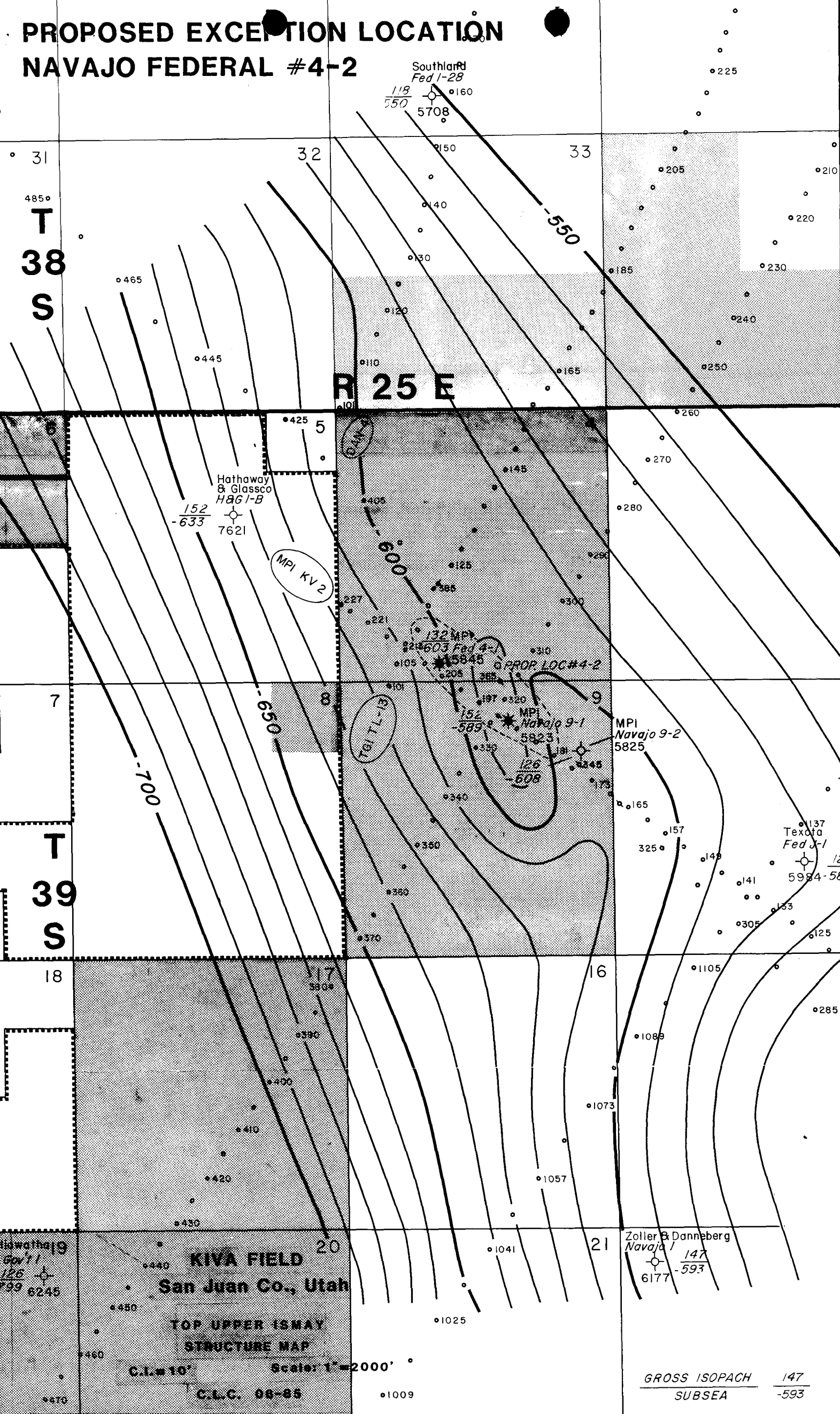


GETTY OIL COMPANY (50%), DONALD B. ANDERSON, LTD. (25%) CHORNEY OIL COMPANY (25%)
(FEDERAL SERIAL NO. U-12426)
(FEDERAL SERIAL NO. U-12424)



PROPOSED LOCATION - MILESTONE'S NAVAJO FEDERAL #4-2
300' FSL - 2225' FEL OF SECTION 4-39S-25E

PROPOSED EXCEPTION LOCATION NAVAJO FEDERAL #4-2



Operations Plan
Navajo Federal #4-2

I. Location: 300'S, 2225'E, Sec. 4, T-39-S, R-25-E, San Juan Co., Utah
Field: Kiva Elevation: 4864'GL

II. Geology:

- A. Formation Tops:
- | | | | |
|---------|----------|--------------|-------|
| Surface | Morrison | Hermosa | 4507' |
| Entrada | 630' | Upper Ismay | 5459' |
| Navajo | 817' | Up.Des.Creek | 5709' |
| Chinle | 1523' | Akah | 5818' |
| Cutler | 2620' | Total Depth | 5845' |
- B. Logging Program: Dual Lateralog-MSFL, GR-Sonic, GR-FDC-CNL, and dipmeter at Total Depth.
- C. Coring Program: 60' core in the Desert Creek zone.
- D. Samples: none
- E. Drillstem testings: 2 tests are anticipated below the Upper Ismay formation.
- F. H₂S protection: no hydrogen sulfide has been found, reported or is known to exist at these depths in this area.

III. Drilling:

- A. Mud Program: a water base mud system from surface to total depth. Maximum anticipated mud weight is 10#/gallon.

IV. Materials:

- A. Casing Program:
- | Hole Size | Depth | Csg.Size | Wt.&Grade |
|-----------|-------------|----------|------------|
| 17 1/2" | 120' | 13 3/8" | 48.0#H-40 |
| 11" | 3000' 3500' | 8 5/8" | 24&32#K-55 |
| 7 7/8" | 5845' | 5 1/2" | 15.5#K-55 |
- B. Float Equipment: 13 3/8" conductor - Texas pattern guide shoe on bottom.
- 8 5/8" surface casing - guide shoe, float collar and bow type centralizers. Run float collar two joints above shoe.
- 5 1/2" production casing - guide shoe, float collar, centralizers and reciprocating wall cleaners.
- C. Tubing: 5845' of 2 7/8", 6.5#, K-55 tubing.
- D. Wellhead equipment: 3000# working pressure xmas tree assesmbly. Wellhead representative to set all slips and cut off casing.

V. Cementing:

13 3/8" conductor - use 140 sks. Class "B" cement with 1/4# flocele/sack and 3% calcium chloride (165 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

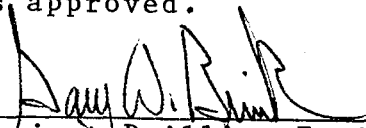
8 5/8" surface casing - use 530 sks. 65/35 Class "B" Poz with 6% gel and 2% calcium chloride (8.3 gallons water per sack), followed by 250 sks. Class "B" with 2% calcium chloride (1154 cu.ft. of slurry, 50% excess to circulate to surface). WOC 12 hours. Test casing to 1000#/30 minutes.

5 1/2" production casing - use 235 sks. 65/35 Class "B" Poz with 6% gel (8.3 gallons water per sack) followed by 100 sks. Class "H" with 10% salt, 10% cal-seal per sack and 0.6% Halad-9 (531 cu.ft. of slurry, 30% excess to fill to base of surface casing.) Run temperature survey 8 hours. WOC 18 hours.

Multi-Point Surface Use Plan
Navajo Federal #4-2

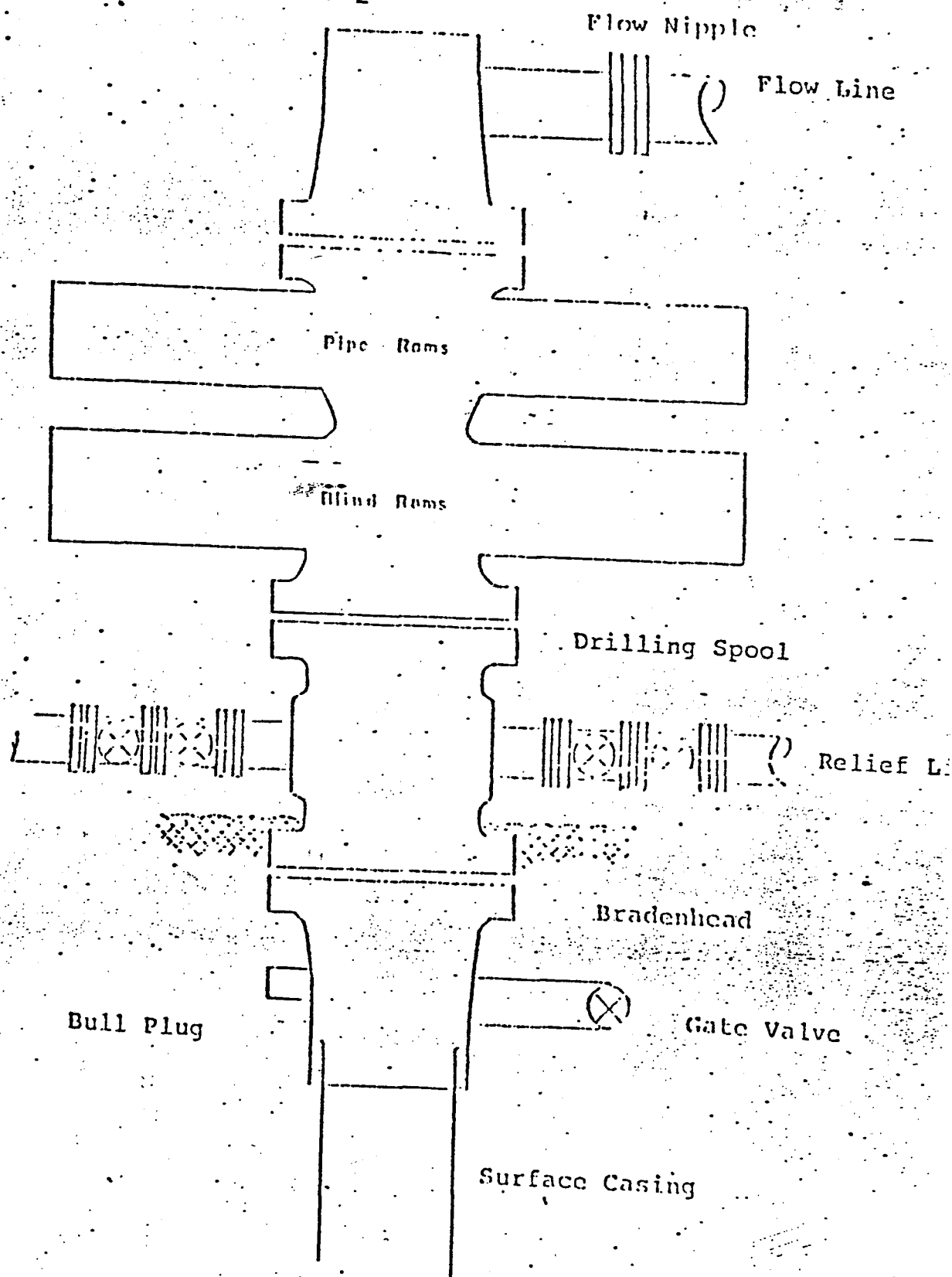
1. Existing Road - Please refer to Map No. 1 which show the existing roads. New roads which will be required have been marked on this map. All existing and new roads will be properly maintained during the duration of this project.
2. Planned Access Roads - Please refer to Map No. 1. The grade of the access roads will be consistent with that of the local terrain. The road surface will not exceed twenty feet (20') in width. Upon completion of the project, the access road will be adequately drained to control soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary by trained Company personnel to insure proper drainage. Gates and/or cattleguards will be installed, if necessary.
3. Location of Existing Wells - Please refer to Map No. 2.
4. Location of Tank Batteries, Production Facilities, and Production Gathering and Service Lines - Please refer to Maps No. 1 and 2. Map No. 2 shows the existing gas gathering lines. Map No. 1 shows the existing roads and new proposed access roads. All known production facilities are shown on these two maps.
5. Location and Type of Water Supply - Water for the proposed project will be obtained from Hugh Benally.
6. Source of Construction Materials - No additional materials will required to build either the access road or the proposed location.
7. Methods of Handling Waste Materials - All garbage and trash materials will be put into a burn pit shown on the attached Location Plat No. 1. When clean-up operations are begun on the proposed project, the burn pit with its refuse will be buried to a depth of at least three feet (3'). A latrine, the location of which is also shown on Plat No. 1, will be provided for human waste.

7. cont'd. If large amounts of liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying any of these materials into the watershed. No earthen pit will be located on natural drainage; all earthen pits will be so constructed as to prevent leakage from occurring.
8. Ancillary Facilities - No camps or air strips will be associated with this project.
9. Wellsite Layout - Please refer to the attached Plat No. 1.
10. Plans for Restoration of the Surface - After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseeding operations will be performed during the time period set forth by the regulatory body. The location production equipment will be painted as designated by the responsible government agency.
11. Other Information- Terrain is bench cove with rabbit brush, grease wood and sage growing. Cattle, sheep, rabbits and deer are occasionally seen on the proposed project site.
12. Operators Representative - D. C. Walker, Post Office Box 4289, Farmington, NM 87499.
13. Certification - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Milestone Petroleum Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

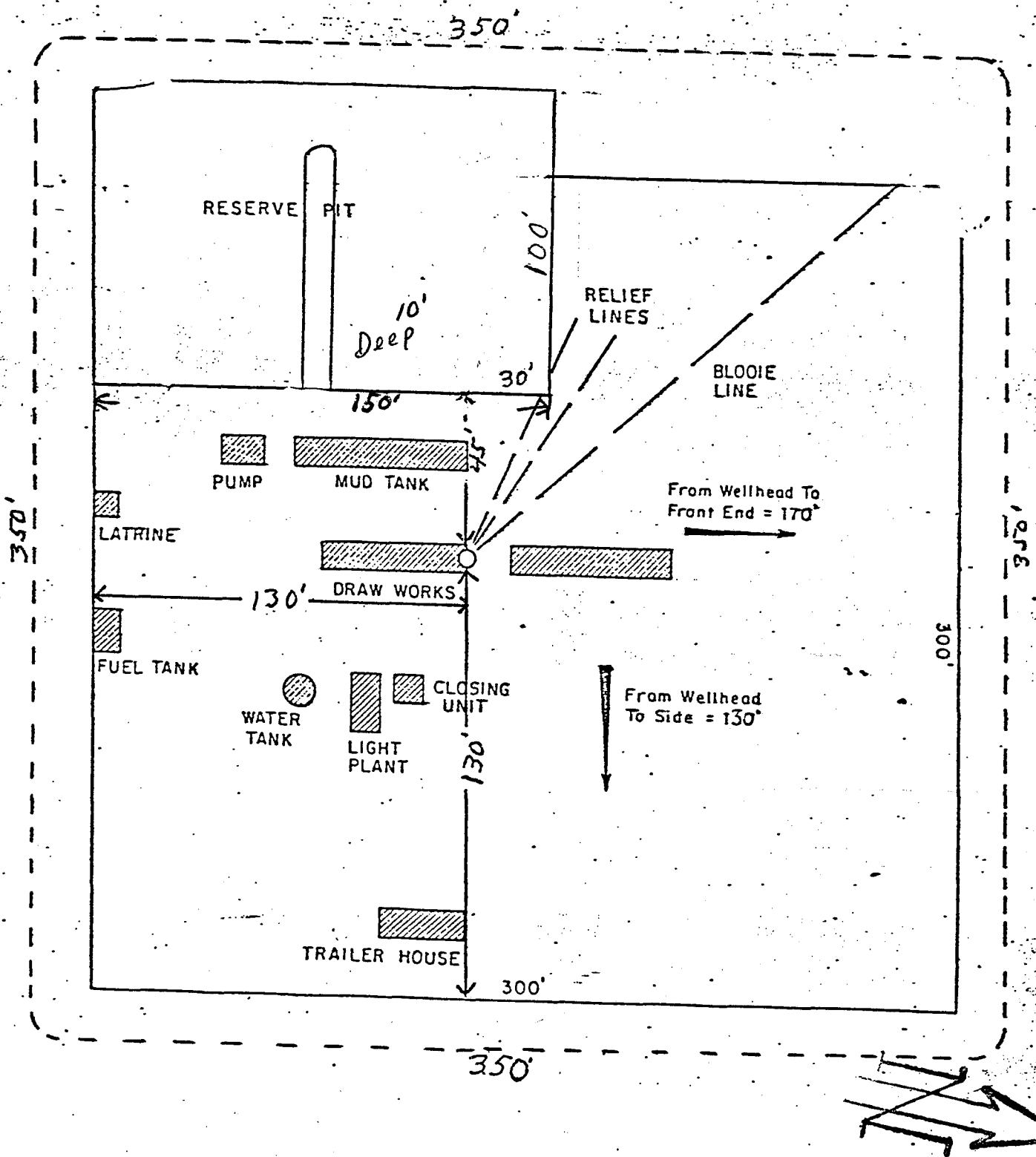


Project Drilling Engineer


Typical B.O.P. Installation



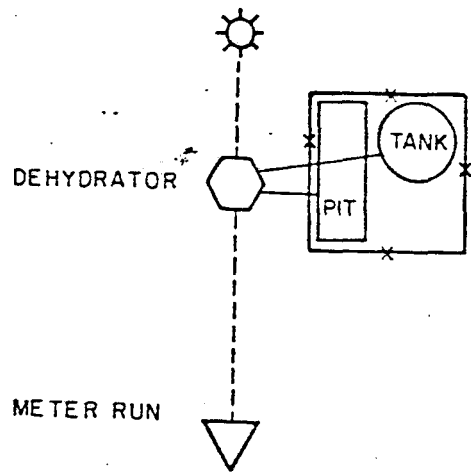
Series 900 Double Gate BOP, rated at 3000 psi Working Pressure
 When gas drilling operations begin a Shaffer type 50 or equivalent rotating head is installed on top of the flow nipple and the flow line is converted into a blowie line.



ENG. REC.		DATE
DRAWN	J.L.H.	8-16-78
CHECKED		
CHECKED		
PROJ. APP.		


 El Paso Natural Gas Company
 TYPICAL LOCATION PLAT FOR

CONFIDENTIAL

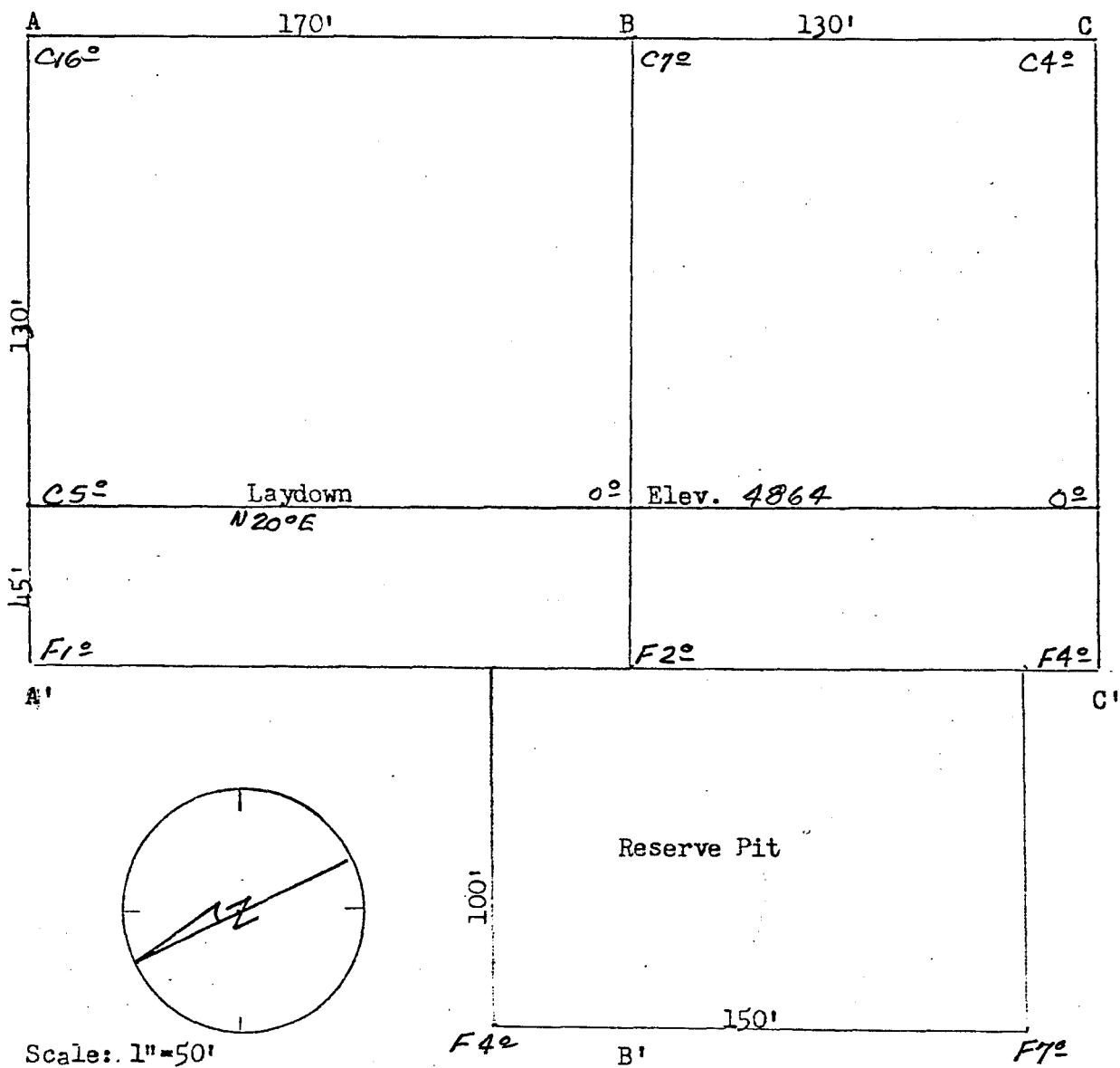


						ENG. REC.	DATE
						DRAWN	
						CHECKED	
						CHECKED	
						PROJ. APP.	
PRT.	SEP.	DATE	TO	W.O.	DESIGN		

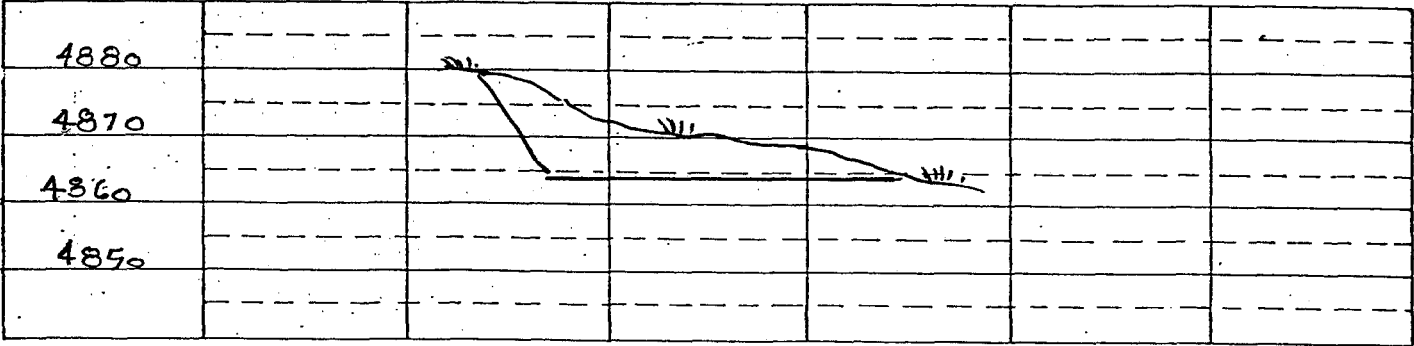


Anticipated Production Facilities For

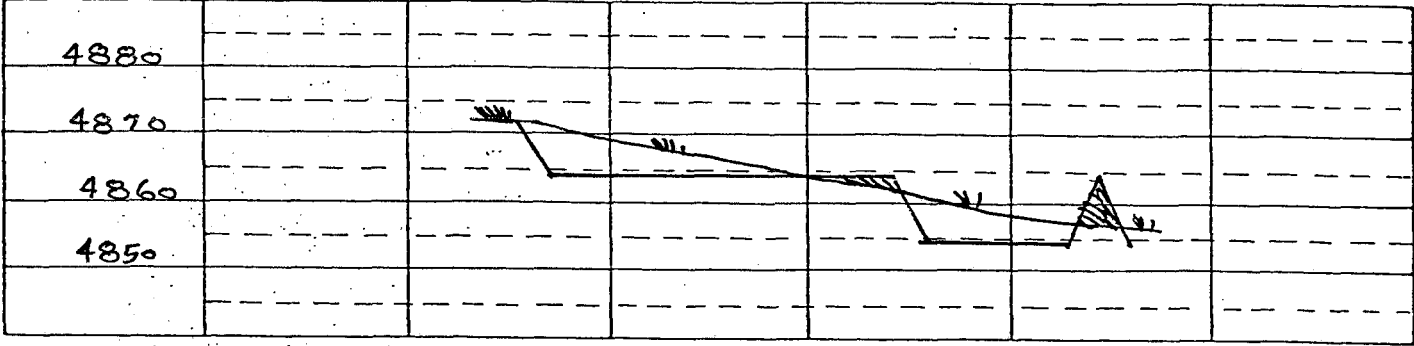
Profile for
 MILESTONE PETROLEUM INC. #4-2 NAVAJO-FEDERAL
 300'FSL 2225'FEL Sec. 4-T39S-R25E
 SAN JUAN COUNTY, UTAH



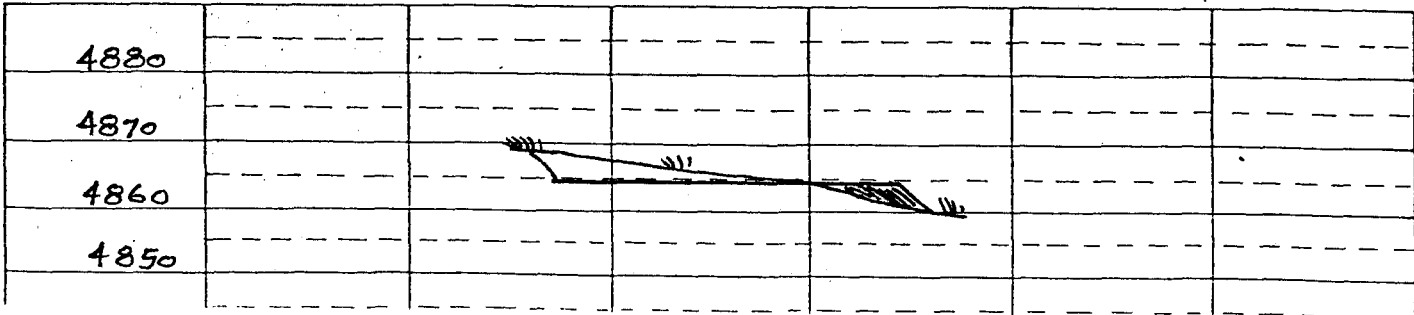
A-A' Horiz: 1"=100' Vert: 1"=30'



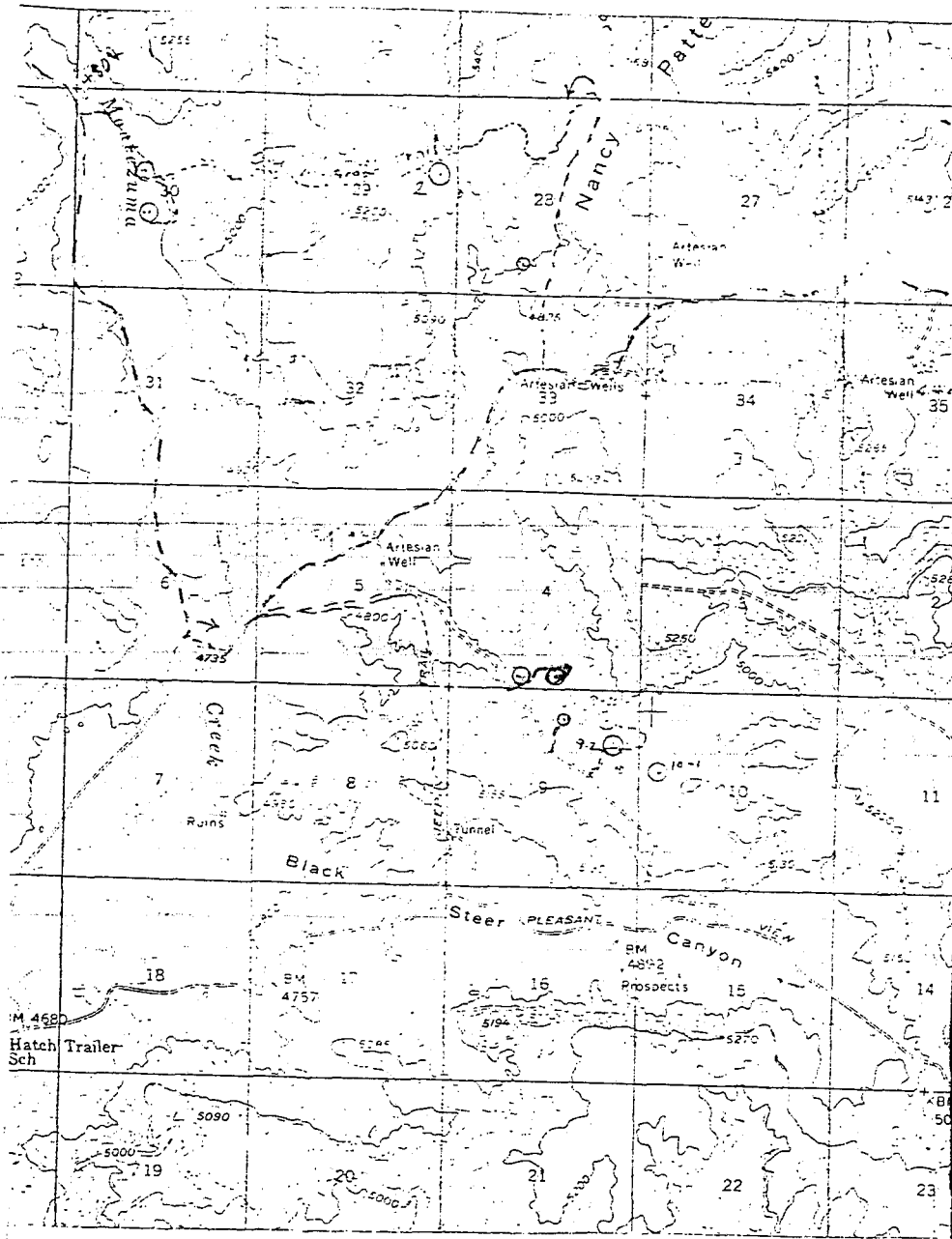
B-B'



C-C'



Vicinity Map for
 MILESTONE PETROLEUM INCORPORATED #1-2 NAVAJO-FEDERAL
 300' FSL 2225' FEL Sec. 4-T39S-R25E
 SAN JUAN COUNTY, UTAH



Map #1

LEGEND OF RIGHT-OF-WAYS

EXISTING ROADS

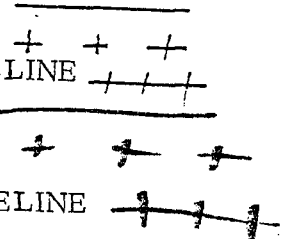
EXISTING PIPELINES

EXISTING ROAD & PIPELINE

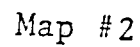
PROPOSED ROADS

PROPOSED PIPELINES

PROPOSED ROAD & PIPELINE



CONFIDENTIAL



Proposed Location:

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		RECEIVED JUN 27 1985 DIVISION OF OIL GAS & MINING	5. LEASE DESIGNATION AND SERIAL NO. U-52333
2. NAME OF OPERATOR Milestone Petroleum			6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR PO Box 4289, Farmington, NM 87499			7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 300'S, 2225'E			8. FARM OR LEASE NAME Navajo Federal
14. PERMIT NO.		15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4864' GL	9. WELL NO. 4-2
			10. FIELD AND POOL, OR WILDCAT Kiva
			11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA Sec. 4, T-39-S, R-25-E
			12. COUNTY OR PARISH San Juan
			13. STATE Utah

18. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>	(Other) <input type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Please amend our Plan of Operations to reflect setting 8 5/8", 24# & 32#, K-55 casing to 3000'.

18. I hereby certify that the foregoing is true and correct

SIGNED Reggie L. Oak TITLE Drilling Clerk DATE 6-24-85

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY: _____

*See Instructions on Reverse Side

OPERATOR Milestone Petroleum Inc DATE 7-2-85
WELL NAME Narayo Fed. 4-2
SEC SW SE 4 T 39S R 2SE COUNTY San Juan

43-037-31161
API NUMBER

Fed
TYPE OF LEASE

CHECK OFF:

☒

PLAT

☒

BOND

☒

NEAREST WELL

☒

LEASE

☒

FIELD

☒

POTASH OR
OIL SHALE

PROCESSING COMMENTS:

OK as per exception location
Exception location requested -
Need water permit

APPROVAL LETTER:

SPACING: ☐ A-3 _____ UNIT

☐ C-3-a _____ CAUSE NO. & DATE

☐ C-3-b

☒ C-3-c

STIPULATIONS:

1- Water



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

July 3, 1985

Milestone Petroleum, Inc.
P. O. Box 4289
Farmington, New Mexico 87499

Gentlemen:

Re: Well No. Navajo Federal 4-2 - SW SE Sec. 4, T. 39S, R. 25E
300' FSL, 2225' FEL - San Juan County, Utah

Approval to drill the above-referenced oil well is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water.

In addition, the following actions are necessary to fully comply with this approval:

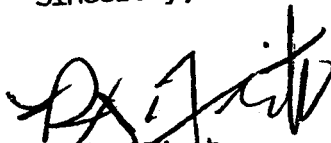
1. Spudding notification to the Division within 24 hours after drilling operations commence.
2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or R. J. Firth, Associate Director, (Home) 571-6068.
4. Compliance with the requirements and regulations of Rule C-27, Associated Gas Flaring, General Rules and Regulations, Oil and Gas Conservation.

Page 2
Milestone Petroleum, Inc.
Well No. Navajo Federal 4-2
July 3, 1985

5. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31161.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

as
Enclosures
cc: Branch of Fluid Minerals

REC'D MDO JUN 24 1985
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on
reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒

GAS
WELL ☐

OTHER

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Milestone Petroleum Inc

RECEIVED

3. ADDRESS OF OPERATOR

PO Box 4289, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

300'S, 2225'E

At proposed prod. zone

DIVISION OF OIL
GAS & MINING

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

6 miles East of Hatch Trading Post, Utah

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

300'

16. NO. OF ACRES IN LEASE

2920.8

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40.00

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

100'

19. PROPOSED DEPTH

5845'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

4864' GL

22. APPROX. DATE WORK WILL START*

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24.

SIGNED

Peggy L. Doak

TITLE

Drilling Clerk

DATE

6-18-85

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

/s/ James J. Anusis

TITLE

Acting DISTRICT MANAGER

DATE

16 JUL 1985

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED

*See Instructions On Reverse Side

FLARING OR VENTING OF
GAS IS SUBJECT OF NTL 4-A
DATED 1/1/80

REC'D JUN 24 1985

COMPANY MILESTONE PETROLEUM, INCORPORATED

LEASE NAVAJO-FEDERAL

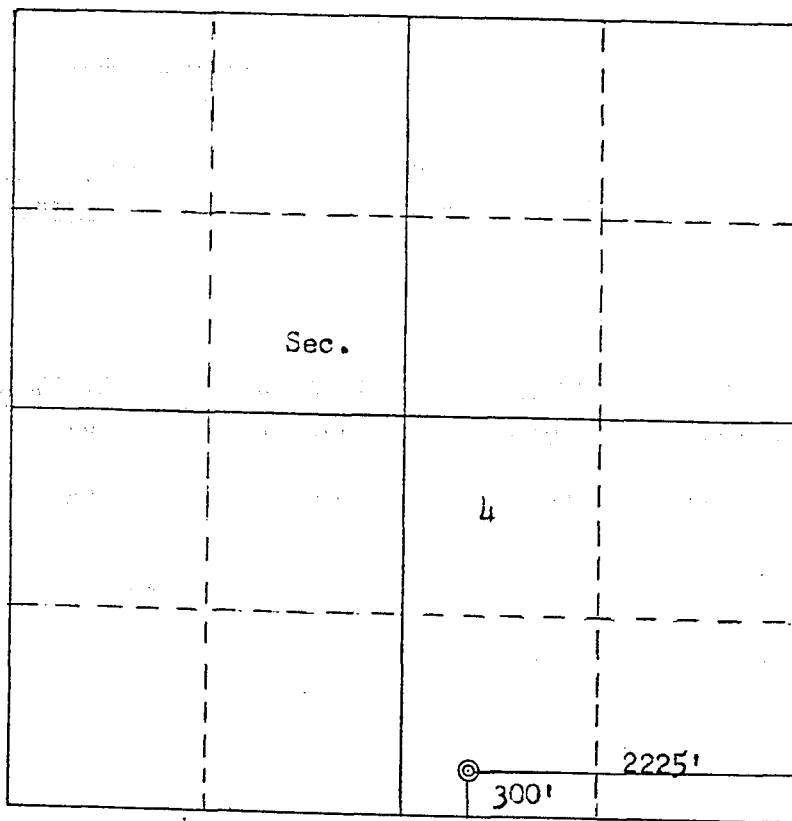
WELL NO. 4-2

SEC. 4, T 39S

R 25E

LOCATION 300' FSL 2225' FEL

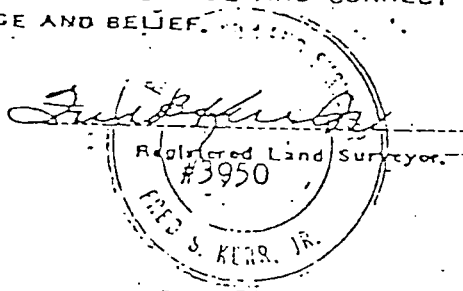
ELEVATION 4864 ungraded ground



SCALE—4 INCHES EQUALS 1 MILE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM
FIELD NOTE OF ACTUAL SURVEYS MADE BY ME UNDER MY SUPER-
VISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE
BEST OF MY KNOWLEDGE AND BELIEF.

SEAL:



SURVEYED

June 17

1985

Milestone Petroleum Inc.
Well No. Navajo Federal 4-2
Sec. 4, T. 39 S., R. 25 E.
San Juan County, Utah
Lease U-52333

RECEIVED

JUL 18 1985

DIVISION OF OIL
GAS & MINING

CONDITIONS OF APPROVAL

A. DRILLING PROGRAM

1. B.O.P.E. will be installed and tested prior to drilling out from surface casing. The pressure test will be to at least 1500 psi and will be recorded in the driller's log.
2. The pipe rams will be closed daily, and the blind rams on every trip to insure good mechanical working order. This will be recorded in the driller's log.
3. All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Order 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to the field representative to insure compliance.
4. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status, without prior approval of the District Office. If operations are to be suspended, prior approval of the District Office will be obtained and notification given before resumption of operations.
5. The spud date will be reported orally to the District Office within a minimum of 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within 24 hours after spudding. If the spudding occurs on a weekend or holiday, the written report will be submitted on the following regular work day.
6. In accordance with Onshore Order No. 1 this well will be reported on Form 3160-6, "Monthly Report of Operations", starting with the month in which operations commence and continued each month until the well is plugged and abandoned. This report will be sent to the District Office, P.O. Box 970, Moab, Utah 84532.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Area Office in accordance with requirements of NTL-3A.

RECEIVED
JUL 18 1985

DIVISION OF OIL
GAS & MINING

7. If a replacement rig is needed for completion operations, A Sundry Notice (Form 3160-5) to that effect will be filed for prior approval from the District Office, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig. In emergency situations verbal approval to bring on a replacement rig will be approved through the District Office.
8. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the Moab District Manager.
9. If the well is to be completed for production the Area Office is to be contacted in order to set up a pre-production conference. When the well is placed in a producing status the District Office is to be notified by telegram or other written communication within five working days.
10. Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed 30 days. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to guidelines in NTL-4A.
11. No well abandonment operations will be commenced without the prior approval of the District Office. In the case of newly-drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the District Office. A Subsequent Report of Abandonment (Form 3160-5) will be sent to the District Office within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Office, or the appropriate surface managing agency. Upon completion of approved plugging, a dry hole marker will be erected in accordance with 43 CFR 3162.6. The top of the marker will be closed or capped. The following minimum information will be permanently placed on the marker; "Fed" or "Ind", as applicable, "Lease number", "Well number", location of well by 1/4 1/4 section, township, and range.

B. THIRTEEN POINT SURFACE USE PLAN

1. The operator will contact the San Juan Resource Area at (801) 587-2201, 48 hours before beginning any dirt work.
 - a. An encroachment permit will be obtained from the San Juan County Road Dept., (801) 587-2231, ext. 43.
 - b. Lease will be accessed from County Road #220.

2. Planned Access Roads:

- a. The maximum total disturbed width will be 30 feet.
- b. Maximum grade: Will be 7% or less.

Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance by the San Juan Area Manager.

The access road will be water barred or brought to Class III Road Standards within 60 days of dismantling of the drill rig. If this time frame cannot be met, the San Juan Area Manager will be notified so that temporary drainage control can be installed along the access road.

The Class III Road Standards which ensure drainage control over the entire road through the use of natural, rolling topography; ditch turnouts; drainage dips; outsloping; crowning; low water crossings; and culverts will be determined at the appropriate field inspection.

3. Location of Tank Batteries and Production Facilities:

All permanent (on site for 6 months or longer) above ground facilities (including pump jacks) will be painted a flat,

nonreflective, earthtone color to match the standard environmental colors, as determined by the Rocky Mountain 5-State Interagency Committee. All facilities will be painted within 6 months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The color will be Sandstone.

If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain 1 1/2 times the storage capacity of the battery.

All loading lines will be placed inside the berm surrounding the tank battery.

All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.

Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place before any deliveries. Tests for meter accuracy will be conducted monthly for the first 3 months on new meter installations and at least quarterly thereafter. The San Juan Area Manager will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the San Juan Area Manager. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

4. Methods of Handling Waste Disposal:

The reserve pit will not be lined with commercial bentonite sufficient to prevent seepage. At least half of the capacity will be in cut.

Three sides of the reserve pit will be fenced with four strands of barbed wire before drilling starts. The fourth side will be fenced as soon as the drilling is completed. The fence will be kept in good repair while the pit is drying.

A trash pit will be constructed near the mud tanks and dug at least six feet into solid undisturbed material. It will be totally enclosed with a fine wire mesh before the rig moves in. The road and pad will be kept litter free.

A burning permit is required for burning trash between May 1 and October 31. This can be acquired by contacting the State Fire Warden, John Baker, at (801) 587-2705.

Produced waste water will be confined to a (lined/unlined) pit for a period not to exceed 90 days after initial production. During the 90 day period an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the District Manager's approval pursuant to Onshore Oil and Gas Order No. 3 (NTL-2B).

5. Well Site Layout:

The reserve pit will be located: On the west, per diagram.

The top 6 inches of soil material will be removed from the location and stockpiled separate from the trees on the East side. Topsoil along the access will be reserved in place.

Access to the well pad will be from: the South.

6. Reclamation:

- a. Immediately on completion of drilling, all trash and debris will be collected from the location and surrounding area. All trash and debris will be disposed of in the trash pit and will then be compacted and buried under a minimum of two feet of compacted soil.
- b. The operator/holder or his contractor will contact the San Juan Resource Area office in Monticello, Utah, (801) 587-2201, 48 hours before starting reclamation work that involves earthmoving equipment and upon completion of restoration measures.
- c. Before any dirt work to restore the location takes place, the reserve pit must be completely dry.
- d. All disturbed areas will be recontoured to blend as nearly as possible with the natural topography. This includes removing all berms and refilling all cuts.
- e. The stockpiled topsoil will be spread evenly over the disturbed area. All disturbed areas will be ripped 10 inches deep with the contour.
- f. Water bars will be built as follows to control erosion.

<u>Grade</u>	<u>Spacing</u>
2%	Every 200 feet
2-4%	Every 100 feet
4-5%	Every 75 feet
5+%	Every 50 feet

- g. Seed will be broadcast between October 1 and February 28 with the following prescription. A harrow or similar implement will be dragged over the area to assure seed cover.

2 lbs/acre Indian ricegrass (Oryzopsis hymenoides)
1 lbs/acre Galleta (Hilaria jamesii)

	1bs/acre Crested wheatgrass (<u>Agropyron desertorum</u>)
3	1bs/acre Western wheatgrass (<u>Agropyron smithii</u>)
	1bs/acre Alkali sacaton (<u>Sporobolus airoides</u>)
	1bs/acre Sand dropseed (<u>Sporogolus cryptandrus</u>)
2	1bs/acre Fourwing saltbush (<u>Atriplex canescens</u>)
	1bs/acre Shadscale (<u>Atriplex confertifolia</u>)
	1bs/acre Green ephedra (<u>Ephedra viridis</u>)
	1bs/acre Cliffrose (<u>Cowania mexicana</u>)
	1bs/acre Desert bitterbrush (<u>Purshia glandulosa</u>)
	1bs/acre Winterfat (<u>Eurotia lanata</u>)
	1bs/acre Globemallow (<u>Sphaeralcea ambigua</u>)
	1bs/acre Wild sunflower (<u>Helianthus annuus</u>)
1	1bs/acre Yellow sweet clover

- h. After seeding is complete, the stockpiled trees will be scattered evenly over the disturbed areas. The access will be blocked to prevent vehicular access.
- i. The reserve pit and that portion of the location and access road not needed for production or production facilities will be reclaimed as described in the reclamation section. Enough topsoil will be kept to reclaim the remainder of the location at a future date. This remaining stockpile of topsoil will be seeded in place using the prescribed seed mixture.

7. Other Information:

The tank battery below the Navajo-Federal 4-1 location would be used for production. Six tanks and an additional separator would be added to the battery. The additional disturbance would expand the battery 5-10 feet towards the road (arch clearance previously completed). The flowline would parallel the access road from the 4-2 well to the battery. The flowline would be above ground for 30 days testing, afterwards the flowline would be removed or buried parallel to the road.

There will be no change from the proposed drilling and/or workover program without prior approval from the District Manager. *Safe drilling and operating practices must be used. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.2.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3164.

The dirt contractor will be provided with an approved copy of the surface use plan.

If subsurface cultural materials are exposed during construction, work in that spot will stop immediately and the San Juan Resource Area Office will be contacted. All people who are in the area will be informed by the operator/holder that they are subject to prosecution for disturbing archaeological sites or picking up artifacts. Salvage or excavation of identified archaeological sites will be done by a BLM approved archaeologist only if damage occurs.

This permit will be valid for a period of one year from the date of approval. After permit termination a new application will be filed for approval for any future operations.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN **ORIGINAL** STATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U 52333
2. NAME OF OPERATOR Milestone Petroleum		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR PO Box 4289, Farmington, NM 87499		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 300'S, 2225'E		8. FARM OR LEASE NAME Navajo Federal
14. PERMIT NO.		9. WELL NO. 4-2
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4864' GL		10. FIELD AND POOL, OR WILDCAT Kiva
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 4, T-39-S, R-25-E SLB&M
		12. COUNTY OR PARISH 13. STATE San Juan UT

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	MULTIPLE COMPLETE	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	ABANDON*	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input checked="" type="checkbox"/>
(Other)			

SUBSEQUENT REPORT OF:

WATER SHUT-OFF	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
FRACTURE TREATMENT	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
SHOOTING OR ACIDIZING	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
(Other)			

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. **DESCRIBE PROPOSED OR COMPLETED OPERATIONS** (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

7-19-85 It is intended to set 80' of 14" line pipe for conductor casing instead of 13 3/8" as reported on our permit to drill. The conductor casing will be cemented to surface.

ACCEPTED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 7/29/85
BY: John R. Baya

Federal approval of this action
is required before commencing
operations.

18. I hereby certify that the foregoing is true and correct

SIGNED Reggie L. Oak

TITLE Drilling Clerk

DATE 7-19-85

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN THIS MANNER
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED

JUL 25 1985

DIVISION OF OIL
& GAS & MINING

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U 52333	
2. NAME OF OPERATOR Milestone Petroleum		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS OF OPERATOR P.O. Box 4289, Farmington, New Mexico 87499		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 300'S, 2225'E		8. FARM OR LEASE NAME Navajo Federal	
14. PERMIT NO.		9. WELL NO. 4-2	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4864' GL		10. FIELD AND POOL, OR WILDCAT Kiva	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SLB & M Sec. 4, T39S, R25E	
		12. COUNTY OR PARISH San Juan	
		13. STATE Utah	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	(Other) <input type="checkbox"/>
(Other) Measure Production <input checked="" type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The Navajo Federal 4-2 will be produced into the Navajo Federal tank battery thru a separate separator. The oil will be produced into separate tanks and measured. The gas will be measured thru a separate flare line.

18. I hereby certify that the foregoing is true and correct

SIGNED Loren W. Fathergill

TITLE Sr. Production Engineer

DATE July 17, 1985

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN PRIVATE
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

U-52333

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo Federal

9. WELL NO.

4-2

10. FIELD AND POOL, OR WILDCAT

Kiva

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 4, T-39-S, R-25-E

12. COUNTY OR PARISH

San Juan

13. STATE

UT

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

Milestone Petroleum

3. ADDRESS OF OPERATOR

PO Box 4289, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with and in accordance with Division of Oil
See also space 17 below.) GAS & MINING
At surface 300'S, 2225'E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

4864' GL

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones perti-
nent to this work.)*

7-22-85 Ran 2 jts. 14", 32.23#, line pipe, 80' set at 92'. Cemented
with 24 sks. cement, circulated to surface.

7-24-85 Spud well 7-24-85.

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE

Drilling Clerk

DATE

7-24-85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

U-52333

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo Federal

9. WELL NO.

4-2

10. FIELD AND POOL, OR WILDCAT

Kiva

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 4, T-39-S, R-25-E

SLB&M

12. COUNTY OR PARISH

San Juan

13. STATE

UT

1.

OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR

Milestone Petroleum

3. ADDRESS OF OPERATOR

PO Box 4289, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)

At surface 300'S, 2225'E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, CR, etc.)

4864' GL

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

Run casing

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

7-29-85 TD 2999'. Ran 75 jts. 8 5/8" 32.0# and 24.0#, K-55 casing, 2985' set at 2999'. Cemented with 482 sks. Class "B" 65/35 Poz with 6% gel, 1/4# flocele/sk. 2% calcium chloride and 1% D-59 (930 cu.ft.) followed by cementing second stage with 362 sks. Class "B" 65/35 Poz with 6% gel, 1/4# flocele/sk. 2% calcium chloride and 1% D-59 (699 cu.ft.)

Circulated cement to surface. Cement fell back. Pumped 50 sks. Class "B" with 2% calcium chloride (59 cu.ft.) to fill to surface.

CONFIDENTIAL

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE Drilling Clerk

DATE 8-19-85

(This space for Federal or State office use)

APPROVED BY

TITLE

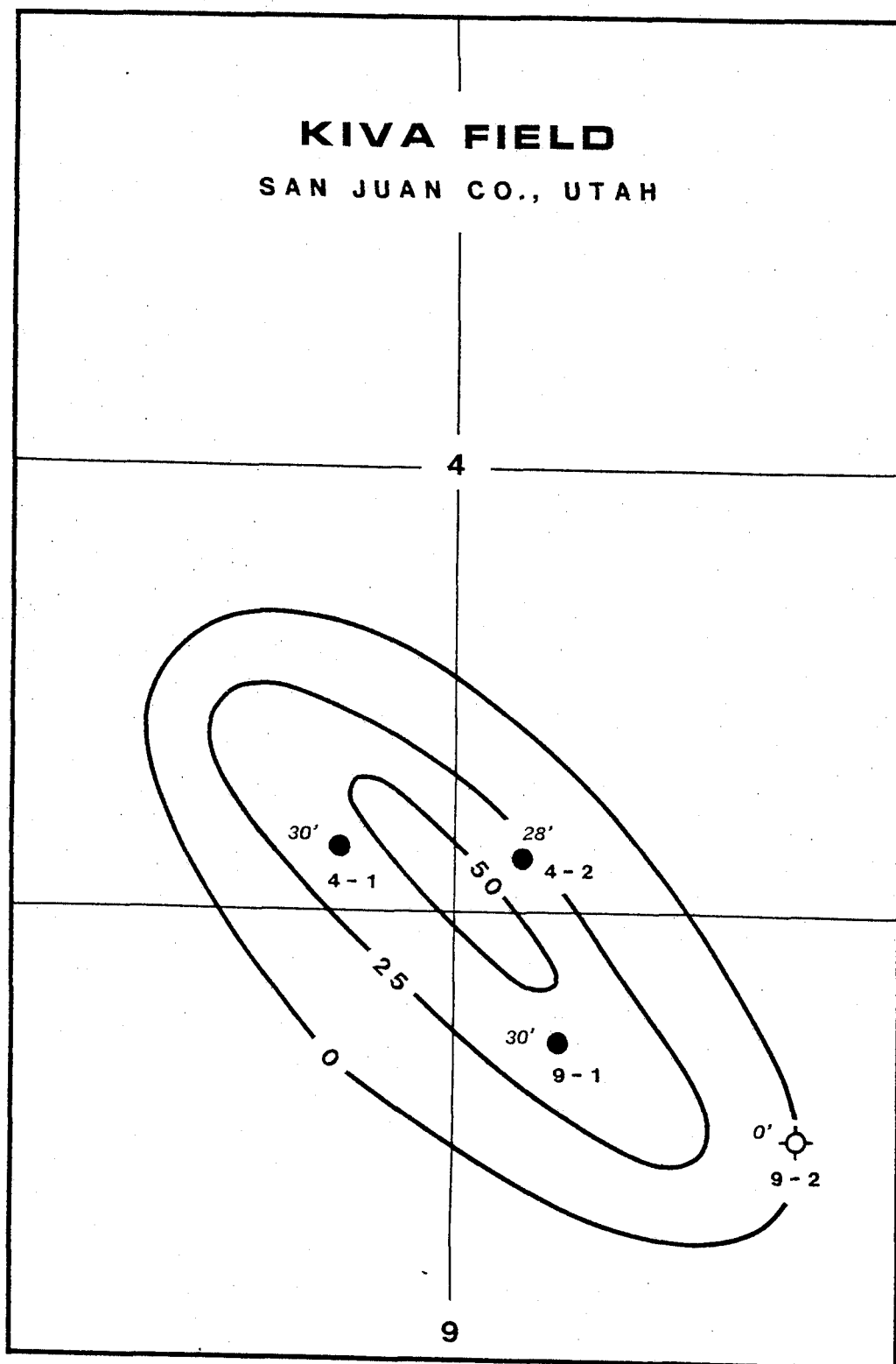
DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

R 25 E

KIVA FIELD
SAN JUAN CO., UTAH



T
39
S

UPPER ISMAY NET POROSITY MAP

$\phi_D > 6\%$

SCALE: 1" = 1000'

C.I. = 25'

KIVA FIELD
GENERAL RESERVOIR DESCRIPTION
(UPPER ISMAY)

Rock Characteristics

Producing Formation	Upper Ismay
Rock Type	Limestone (dolomitic in part)
Producing Mechanism	Solution Gas Drive
Average Depth	5525' (-665' ss)
Average Porosity	15.0%
Average Net Pay	25.0' $\phi \geq 6\%$
Reservoir Size	192.4 acres
	4384 acre-feet
	657.6 porous-acre-feet
Average Permeability	6.3 md (9-1 core $\phi \geq 6\%$)
Effective Permeability	9.0-36.6 md, (4-1 and 9-1 DST's-fracturing indicated)
Initial Water Saturation	25%
Oil-Water Contact	Unknown
Gas-Oil Contact	Unknown
Reservoir Temperature	136°F (9-1 buildup)

Reservoir Fluid Properties

Oil Gravity	41.00 API @ 60°F
Original Reservoir Pressure	1837 psi (4-1 DST & 9-1 buildup)
Bubble Point Pressure	*1843 psig
Oil Formation Volume Factor	*1.5 RB/STBO
Oil Viscosity	*0.54 cp @ reservoir temperature and pressure
Solution GOR	*855 SCF/STBO @ bubble point pressure
Average Producing GOR	930 SCF/STBO
Gas Gravity	.977 @ 14.7 psi and 60°F
Original Gas Formation Volume Factor	.000938 RB/SCF (189.90 SCF/CF)

Reserves (Total Reservoir)

Original-Oil-In-Place	2,550,000 STBO
Recoverable Reserves	433,500 STBO (99 STBO/ac-ft)
	403,000 MCF
Recovery Factor (Primary)	17.0% of OOIP
(Reinjection)	30.0%
(Waterflood)	40.0%

*Data measured in 4-1 PVT analysis of Desert Creek Formation. Reservoir characteristics appear to be nearly identical in both the Desert Creek and Upper Ismay formations and therefore fluid properties are suspected to be similar.

LRS/ch
10/21/85
0541P

KIVA FIELD
GENERAL RESERVOIR DESCRIPTION
(DESERT CREEK)

Rock Characteristics

Producing Formation	Desert Creek
Rock Type	Dolomite
Producing Mechanism	Solution Gas Drive
Average Depth	5768' (-900' ss)
Average Porosity	21.5% (4-1) will assume 15% Ø avg. for reservoir calculations
Average Net Pay	9.6' Ø ≥10%
Reservoir Size	Unknown
Average Permeability	Unknown
Effective Permeability	Zone 1 - 22 md, Zone 2 - 108 md (4-1 buildup-fracturing indicated)
Initial Water Saturation	25%
Oil-Water Contact	Unknown
Gas-Oil Contact	Unknown
Reservoir Temperature	138°F (4-1 buildup)

Reservoir Fluid Properties

Oil Gravity	40.8° API @ 60°F
Original Reservoir Pressure	*1935 psi (4-1 buildup)
Bubble Point Pressure	1843 psig (4-1 PVT study)
Oil Formation Volume Factor	1.5 RB/STBO
Oil Viscosity	0.54 cp @ Reservoir temperature and pressure
Solution GOR	855 SCF/STBO @ bubble point pressure
Average Producing GOR	1200 SCF/STBO
Gas Gravity	.977 @ 14.7 psi and 60°F
Original Gas Formation Volume Factor	.000938 RB/SCF (189.90 SCF/CF)

Reserves (Total Reservoir)

Original-Oil-In-Place	Unknown
Recoverable Reserves	Unknown

*The pressure shown is close to the original BHP but not the true pressure since no initial DST or pressure was taken until January 28, 1985, after the Desert Creek had produced 4299 BO/5238 MCF.

LRS/ch
10/21/85
0541P

PRESSURE BUILD UP - 15 Days
1/28/85-2/12/85
NAVAHO FEDERAL NO 4-1
(Desert Creek)

$q_0 = 425$ BOPD
 $M_1 = 200$ psi/cycle
 $M_2 = 40$ psi/cycle
 $P_1 = 1935$ psi
 $P_2 = 1895$ psi

$u_0 = .54$ cp
 $B_0 = 1.5$
 $\phi = .215$
 $C_t = 15 \times 10^{-6}$
 $h = 13'$

$r = .33'$
 $t = 243$ hrs.

$$K_2 h = \frac{162.6 (425)(.54)(1.5)}{40} = 1399 \text{ md - ft}$$

$$K_2 = \frac{1399}{13} = 108 \text{ md}$$

$$K_1 h = \frac{162.6 (425)(.54)(1.5)}{200} = 280 \text{ md - ft}$$

$$K_1 = \frac{280}{13} = 21.5 \text{ md}$$

$$S_1 = 1.151 \left[\left(\frac{1456-1418}{200} \right) - \log \left(\frac{21.5}{(.215)(.54)(15 \times 10^{-6})(.33)^2} \right) \right] + 3.23$$

$$S_1 = -5.3 \quad \Delta p_{\text{skin}} = .87 (-5.3) (200) = -922 \text{ psi}$$

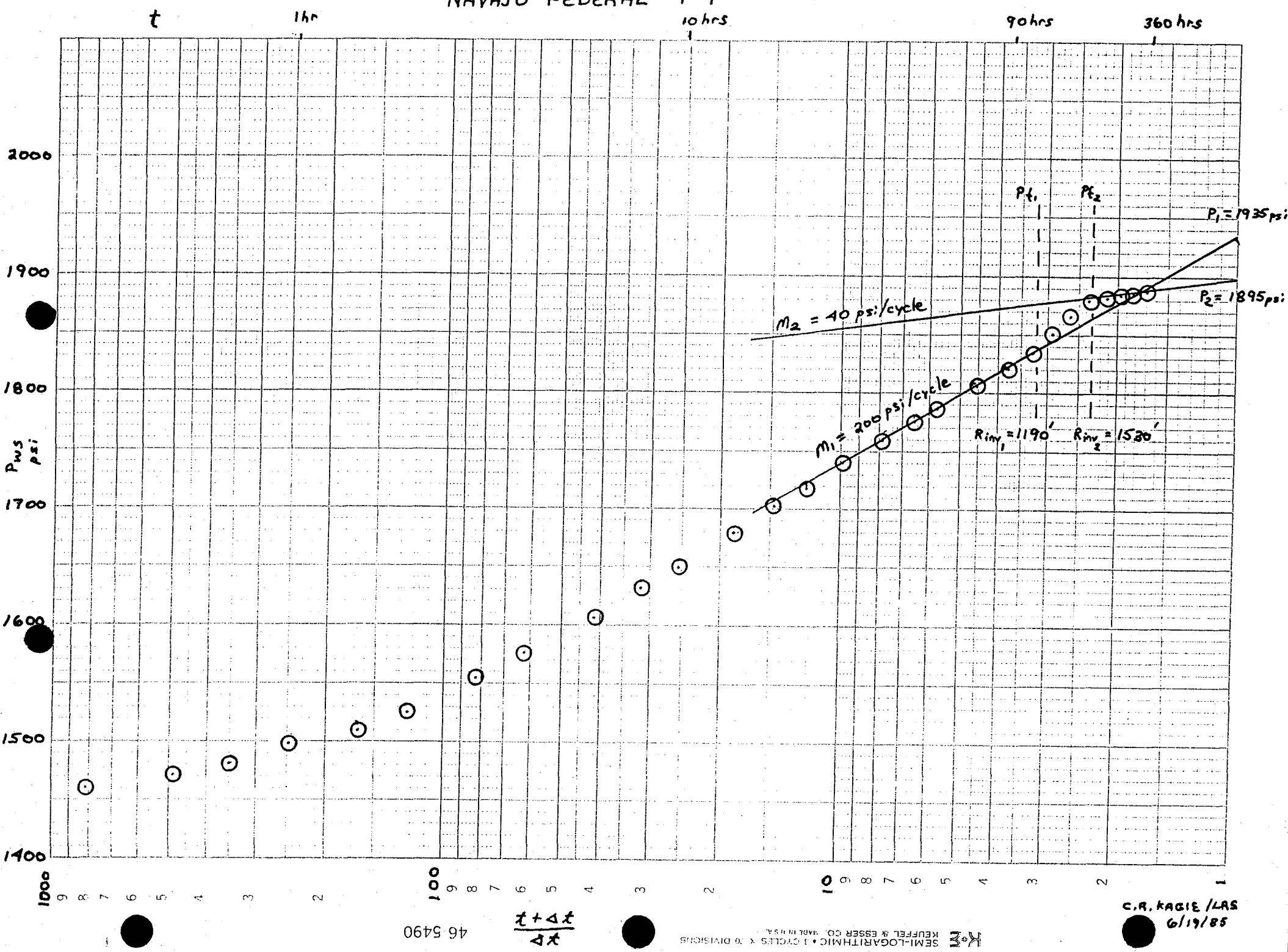
$$DR = \frac{1935 - 1418}{1935 - 1418 - (-922)} = .4$$

$$r_{\text{inv pt1}} = \frac{(.00105) (21.5) (110)}{(.215) (.54) (15 \times 10^{-6})} = 1190' \quad D = \frac{\pi 1190^2}{43560} = 102 \text{ Acres}$$

$$r_{\text{inv pt2}} = \frac{(.00105) (21.5) (180)}{(.215) (.54) (15 \times 10^{-6})} = 1530'$$

- Notes:
- 1) Fractures near wellbore
 - 2) 2 Permeability regions $K_1 = 22\text{md}$
 $K_2 = 108 \text{ md}$
 - 3) Boundary effects from edge of sand @ 1200' from wellbore

NAVAJO FEDERAL 4-1



46 5490

$$\frac{x + \Delta x}{\Delta x}$$

SEMI-LOGARITHMIC • 1 CYCLES X 10 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

C.R. KAGIE / LRS
6/19/85

PRESSURE BUILD UP - 15 Days
9/10/84 - 9/26/84

NAVAHO FEDERAL NO 9-1
(Upper Ismay)

q_o = 338 BOPD
M = 385 psi/cycle
P* = 1837 psi
u_o = .54 cp
Bo = 1.5

Ø = 15.0%
ct = 15 x 10⁻⁶
h = 25'
r_w = .33
t = 460 hrs

P_{wf} = 501 psi
P_{1hr} = 554

$$K_h = \frac{162.6 q_{o,u} B_o}{M}$$

$$K_h = \frac{162.6(338)(.54)(1.5)}{385} = 115.6 \text{ md-ft}$$

$$K = \frac{115.6}{25} = 4.6 \text{ md}$$

$$S = 1.15 \left[\left(\frac{P_{1hr} - P_{wf}}{M} \right) - \log \left(\frac{K}{\phi u c r_w^2} \right) + 3.23 \right]$$

$$S = 1.15 \left[\left(\frac{554 - 501}{385} \right) - \log \left(\frac{4.6}{(.15)(.54)(15 \times 10^{-6})(.33)^2} \right) + 3.23 \right]$$

$$S = -4.8$$

$$\Delta P_{\text{skin}} = .87 S M$$

$$\Delta P_{\text{skin}} = (.87)(-4.8)(385) = -1608 \text{ psi}$$

$$DR = \frac{P^* - P_{wf}}{P^* - P_{wf} - P_{\text{skin}}} = \frac{1837 - 501}{1837 - 501 - (-1608)} = .45$$

$$R_{\text{inv}} = \frac{.00105 \text{ kt}}{\phi u c t}$$

$$R_{\text{inv}} = \frac{(.00105)(4.6)(290)}{(.15)(.54)(15 \times 10^{-6})} = 1074'$$

$$D = \frac{\pi (1074)^2}{43560} = 83 \text{ acres}$$

NAVAJO FEDERAL 9-1

PRESSURE BUILDUP

9/10/84 - 9/26/84

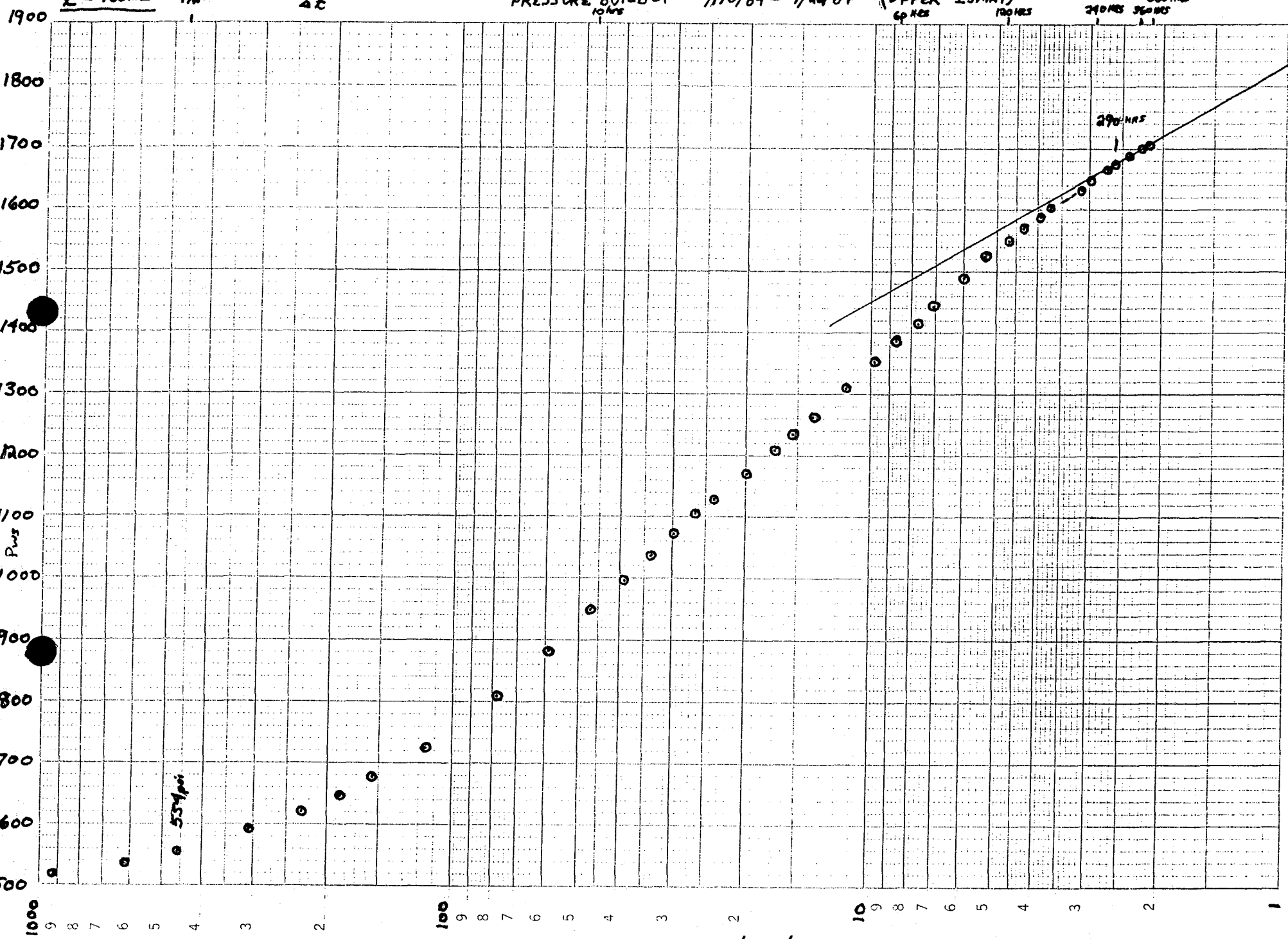
(UPPER ISMAY)

t = 160 HRS

1 hr

4t

240 HRS 360 HRS 385 HRS



EXTRAP
1887
psi

240 HRS

534 psi

46 5490

SEM-LOGARITHMIC • 3 CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.
DIVISIONS

58/10/7

SUMMARY OF RESERVOIR PARAMETERS

USING HORNER METHOD FOR LIQUID WELLS

GAS/OIL RATIO 507.5 SCF/STB FLUID GRADIENT 0.22 psi/ft
 TEMPERATURE 130.7 °F FLUID PROPERTIES 1720.5 cp
 NET PA 56.0 F VISCOSITY 0.548 cp
 POROSITY 10.0 % SYSTEM COMPRESSIBILITY 18.53 $\times 10^{-6}$ vol/vol/psi
 PIPE CAPACITY FACTOR 0.00492 0.01422 bbl/ft

GAUGE NUMBER		2032	2033					
GAUGE DEPTH		5455.0	5537.0					
FLOW AND CIP PERIOD		2	2					UNITS
FINAL FLOW PRESSURE	P_f	678.3	703.4					psig
TOTAL FLOW TIME	t	150.2	150.2					min
EXTRAPOLATED PRESSURE	P^*	1743.2	1770.3					psig
ONE CYCLE PRESSURE		1514.2	1541.3					psig
PRODUCTION RATE	Q	102.9	105.3					BPD
TRANSMISSIBILITY	kh/ μ	94.0	96.2					md-ft cp
FLOW CAPACITY	kh	60.5335	61.9648					md-ft
PERMEABILITY	k	1.08096	1.10651					md
SKIN FACTOR	S	0.6	0.6					
DAMAGE RATIO	DR	1.1	1.1					
POTENTIAL RATE	Q_1	116.8	119.5					BPD
RADIUS OF INVESTIGATION	r_i	48.2	48.8					ft

REMARKS: CALCULATION SERVICES WERE PERFORMED UPON THE FINAL CLOSED-IN PERIOD READINGS ONLY. DEVELOPMENT OF THE INITIAL CLOSED-IN PERIOD IS INSUFFICIENT FOR CALCULATION PURPOSES.

THE REPORTED SAMPLER PRESSURE MAY BE QUESTIONABLE--APPEARS TO HAVE TRAPPED A PORTION OF THE CLOSED-IN PRESSURE. THE GOR DETERMINED FROM THE SAMPLER WAS NOT USED FOR CALCULATION PURPOSES.

ALL CALCULATED PARAMETERS ARE RELATIVE TO OIL PRODUCTION. PRODUCTION RATES WERE DETERMINED BY USING THE PRESSURE CHANGE METHOD OVER THE MID-LATTER PORTION OF THE FINAL FLOW PERIOD.

VALUES FOR VISCOSITY, GAS-OIL RATIO, AND FORMATION VOLUME FACTOR ARE SLIGHTLY DIFFERENT THAN KWIK-DATA SERVICE CALCULATED VALUES. THIS IS BECAUSE OF THE DIFFERENCE IN GAS GRAVITY VALUES INPUTED TO CORRELATIONS. KWIK-DATA GAS GRAVITY \Rightarrow .6. THIS VERSION GAS GRAVITY \Rightarrow .7. ACCORDING TO AREA KNOWLEDGE AND THE RESERVOIR CONTENT, .7 IS A MORE CORRECT VALUE FOR GAS GRAVITY.

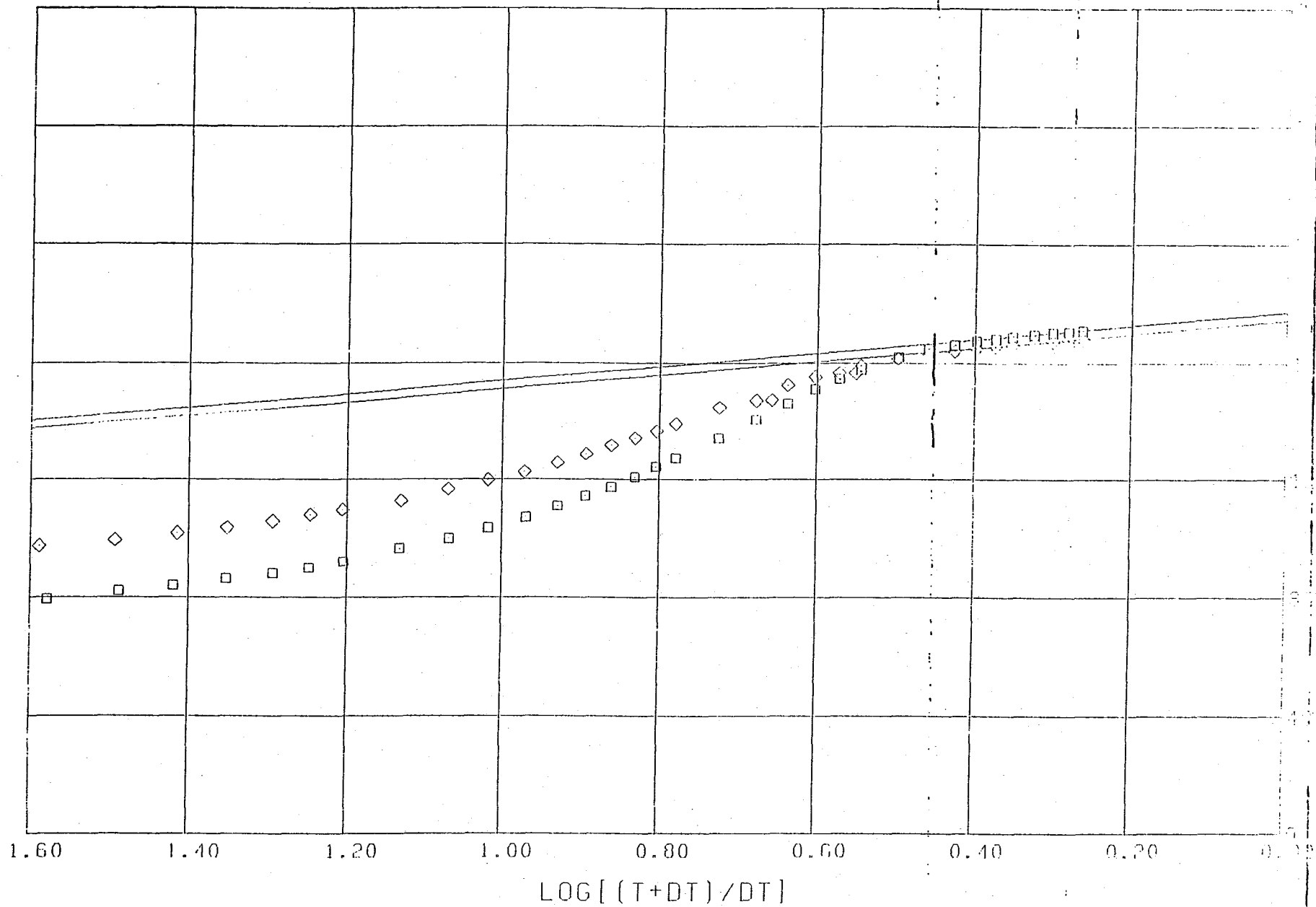
POOR COPY

NOTICE: THESE CALCULATIONS ARE BASED UPON INFORMATION FURNISHED BY YOU AND TAKEN FROM GRILL STEM PRESSURE CHARTS, AND ARE FURNISHED YOU FOR YOUR INFORMATION. IN FURNISHING SUCH CALCULATIONS AND EVALUATIONS BASED THEREON, HALLIBURTON IS MERELY EXPRESSING ITS OPINION. YOU AGREE THAT HALLIBURTON MAKES NO WARRANTY EXPRESS OR IMPLIED AS TO THE ACCURACY OF SUCH CALCULATIONS OR OPINIONS, AND THAT HALLIBURTON SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, WHETHER DUE TO NEGLIGENCE OR OTHERWISE, IN CONNECTION WITH SUCH OPINIONS.

GAUGE NO CIP 1 2
2032 ◇

GAUGE NO CIP 1 2
2033 □

TICKET NO 230608



Form 3160-4
(November 1983)
(formerly 9-339)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1. TYPE OF WELL:

WELL ☒ OIL WELL ☐ GAS WELL ☐ DRY ☐ Other ☐

2. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PUMP BACK ☐ DIFF. RESER. ☐ Other ☐

3. NAME OF OPERATOR

Milestone Petroleum Inc.

4. ADDRESS OF OPERATOR

P. O. Box 4289, Farmington, NM 87499

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements):

At surface 370°S 1940°W

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

15. DATE SPECIFIED

12-19-84

16. DATE T.D. REACHED

12-30-84

17. DATE COMPL. (Ready to prod.)

5-30-85

18. ELEVATIONS (D.V. R.B. AT. GS. ETC.)

4862' GL

20. TOTAL DEPTH, MD & TVD

5827'

21. FLUG. BACK T.D. MD & TVD

5827'

22. IF MULTIPLE COMPL.

ONE

23. INTERVALS

UNTESTED BY

24. PRODUCING INTERVAL (S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)

5771'-5784' (Desert Creek)

5543'-5596' (Upper Ismay)

26. TYPE ELECTRIC AND OTHER LOGS RUN

GR-Sonic, High Resolution Dipmeter, GR-Litho-Den-GR-Comp. Laser, Intermountain Geo. Tech, GR-Dual Lateralog-MSFL, etc.

25. WAS WELL CORED

NO

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOUL SIZE	CEMENTING RECORD	AMOUNT FULLED
13 3/8"	48#	211'	17 1/2"	277 cu ft	
8 5/8"	24 & 32# 1/2	3518'	11"	1839 cu ft	
5 1/2"	14 & 15.5#	5825'	7 7/8"	712 cu ft	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	30. TUBING RECORD
SIZE	DEPTH SET (MD)	PACKER SET (MD)			
A					
	2 7/8"	5343'	5343'		

31. PERFORATION RECORD (Interval, size and number)

5771-84, 5593-96, 5565-78, 5559,
5551-54, 5543-48, w/2 SPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5771-5784	13,000 gal 15% Acid /15,000 gal gel fluid
5543-5593	18,400 gal 15% acid/26,000 gal gel fluid

33. PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)										WELL STATUS (Producing or shut-in)	
DC - 1-19-85		Flowing for clean up										Producing	
IS - 5-24-85													
DATE OF TEST		HOURS TESTED	ORIG. SIZE	PERIOD FOR TEST PERIOD		OIL—BBL	GAS—MCF	WATER—BBL		GAS/OIL RATIO			
DE - 5-20-85		72	32/64	→		DC/2810.82	DC/3383	DC/6		DC/1204			
IS - 5-30-85						IS/3006.30	IS/2289	IS - 0 -		IS/761			
FLOW, TUBING PAKER		CASING PRESSURE		CALCULATED 24-HOUR RATE		OIL—BBL	GAS—MCF	WATER—BBL		OIL GRAVITY-API (CORR.)			
DC/243		DC/200				DC/936.94	DC/1127	DC/6		DC/40.8			
IS/300		IS/253		→		IS/1002.1	IS/765	IS/ - 0 -		IS/41			
24. DISPOSITION OF GAS (Solid, used for fuel, vented, etc.)													

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Vented

35. NO. OF ATTACHMENTS

CBL & Cement Record

36. I hereby certify that the foregoing and attached information is complete and correct as determined from a reliable source.

SIGNED

TITLE

Drilling Clerk

DATE 6-11-85

*(See Instructions and Special Additional Data on Reverse Side)

Title is U.S.C. Section 1001. makes it a crime for any person to knowingly and willfully

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*

(See other In-
structions on
reverse side)

Form approved,
Budget Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1A. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ Other _____

B. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. ENVR ☐ Other _____

2. NAME OF OPERATOR

3. ADDRESS OF OPERATOR

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface

300'S, 2225'E

At top prod. interval reported below

At total depth

CONFIDENTIAL

PERMIT NO.

DATE ISSUED

15. DATE SPUDDED 7-24-85 16. DATE T.D. REACHED 8-11-85 17. DATE COMPL. (Ready to prod.) 9-6-85

18. ELEVATIONS (DF. RKB, RT, GR, ETC.)* 4864' GL 19. ELEV. CASINGHEAD 4864'

20. TOTAL DEPTH, MD & TVD 5825' 21. PLUG. BACK T.D., MD & TVD 5803'

22. IF MULTIPLE COMPL. HOW MANY* 23. INTERVALS DRILLED BY Rotary 24. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 5524 - 5597' (Upper Ismay)

25. TYPE ELECTRIC AND OTHER LOGS RUN Dual-Lateralog; MSFL; Sonic; Comp. Neutron; Lithodensity; Dipmeter; Directional log; GR-CCL 27. WAS WELL CORED yes

CASING RECORD (Report all strings set in well)			CEMENTING RECORD		
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE		AMOUNT PULLED
14"	32.23#	92'	15"	24 sks.	
8 5/8"	32 & 24#	2999'	12 1/4"	1692 cu.ft.	
5 1/2"	15.5#	5825'	7 7/8"	1327 cu.ft.	

LINER RECORD					TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 7/8"	5322'	5322'

31. PERFORATION RECORD (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
5524-36', 5539-43', 5546-51', 5557-5568', 5571'-82', 5585-92', 5595-5597' w/2 spf		DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
		5524-5597'	5000 gal. 15% San-1 acid
			28,000 gal. 28% San-1 acid
			30,000 gals 40# gel
			2,770 gal. flush

33.* PRODUCTION							
DATE FIRST PRODUCTION 9-2-85		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) flowing				WELL STATUS (Producing or shut-in) shut in	
DATE OF TEST 9-6-85	HOURS TESTED 24	CHOKE SIZE 2"	PROD'N. FOR TEST PERIOD	OIL—BBL. 960.73	GAS—MCF. 1890	WATER—BBL. 39	GAS-OIL RATIO 1967
FLOW. TUBING PRESS. 300	CASING PRESSURE 0	CALCULATED 24-HOUR RATE	OIL—BBL. 960.73	GAS—MCF. 1890	WATER—BBL. 39	OIL GRAVITY-API (CORR.) 41.1	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) vented, to be sold

35. LIST OF ATTACHMENTS temp. survey

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Chris Loney TITLE Drilling Clerk DATE 10-15-85

*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS		
				NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Morrison	Surface	630	Interbed grn brn and red waxy sh & fn to cr grn sd.	Morrison	Surface	
Entrada	630	817	Orange, fn gr cl unconsolidated rd to sub-rd ss.	Entrada	630	
Navajo	817	1523	Wh to orange frn to cr grn ss, red organe soft wiltstone, red to brn soft silty sh.	Navajo	817	
Chinle	1523	2380	Rd to rd br sft sh w/occas. thn beds of brn & gry lst.	Chinle	1523	
Shinarump	2380	2620	Gry & purple med grn congl. ss inter w/soft brn & grn sh.	Shinarump	2380	
Cutler	2620	4507	Rd brn soft anhy. sh. Shale & sils-stone	Cutler	2620	
Hermosa	4507	5461	Wh gry & buff fn cryst hd chirty ls.	Hermosa	4507	
Upper Ismay	5461	5685	White to gray, buff to brown, cryp to crystalline to granular, fossi-liferous dolomitic clean to orgilla-ceous, silty-earthly limestone with interbedded anhydrite and gray to brown, crypto crystalline to gran dolomite.	Upper Ismay	5461	
Upper Desert Creek	5685	5800	Lt to drk gry to brn cryptocrystalline to gran, earthy, silty dolomites w/ interbed anhyd and carb sh.	Upper Desert	5685	
Cored Desert Creek	5730' to 5772'.					
DST #1 - Tested 5486' to 5600'. No cushion. SI/60 min. Final SIP/1681' psi.			ISIP 2579' psi. 1st flow 31 min. Recovered gas to surface @ 347 psi. Open tool 120 min. Recovered gas to surface @ 679' psi. SI/180 min. Reversed out 16 bbls. oil & gas cut mud Oil gravity 42.8 API.			

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See instructions on
reverse side)

oved.
Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> Other _____		5. LEASE DESIGNATION AND SERIAL NO. U-52333	
2. TYPE OF COMPLETION: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. REMOV. <input type="checkbox"/> Other _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. NAME OF OPERATOR Milestone Petroleum		7. UNIT AGREEMENT NAME	
4. ADDRESS OF OPERATOR PO Box 4289, Farmington, NM 87499		8. FARM OR LEASE NAME Navajo Federal	
9. WELL NO. 9-1		10. FIELD AND POOL, OR WILDCAT Wildcat	
11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 9, T-39-S, R-25-E		12. COUNTY OR PARISH San Juan	
13. STATE Utah		14. PERMIT NO.	
15. DATE SPUDDED 7-13-84		16. DATE T.D. REACHED 8-5-84	
17. DATE COMPL. (Ready to prod.) 8-22-84		18. ELEVATIONS (DF, RKB, RT, GR, ETC.) * 4826' DF	
19. ELEV. CASINGHEAD 4838' GR		20. TOTAL DEPTH, MD & TVD 5823'	
21. PLUG BACK T.D., MD & TVD 5779'		22. IF MULTIPLE COMPL., HOW MANY * one	
23. INTERVALS DRILLED BY Rotary		24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) * 5519-5586' (Upper Ismay)	
25. WAS DIRECTIONAL SURVEY MADE		26. TYPE ELECTRIC AND OTHER LOGS RUN Dual Induction Dens-Comp. Neutron; Cyberlook; GR Spectro.; Comp. Sonic;	
27. WAS WELL CORED yes		28. CASING RECORD (Report all strings set in well)	
CASING SIZE		WEIGHT, LB./FT.	
9 5/8"		40#	
5 1/2"		17 1/2	
DEPTH SET (MD)		HOLE SIZE	
1525'		12 1/4"	
5823'		8 3/4"	
CEMENTING RECORD		AMOUNT PULLED	
1122 cu. ft.			
2013 cu. ft.			
29. LINER RECORD		30. TUBING RECORD	
SIZE		SIZE	
TOP (MD)		DEPTH SET (MD)	
BOTTOM (MD)		PACKER SET (MD)	
BACKS CEMENT*			
SCREEN (MD)			
2 7/8"		5453'	
31. PERFORATION RECORD (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
5581-86' w/2 spf. 5561-67', 5556-58', 5548-52', 5542-45', 5530-32', 5519-23' w/2 spf.		DEPTH INTERVAL (MD)	
		AMOUNT AND KIND OF MATERIAL USED	
		5519-5586' 2730 gal. 15% acid	
33. PRODUCTION		34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)	
DATE FIRST PRODUCTION 8-22-84		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) flowing for clean up	
WELL STATUS (Producing or shut-in) shut in		35. LIST OF ATTACHMENTS cementing report and temp. survey	
DATE OF TEST 9-13-84		HOURS TESTED 24	
CHOKE SIZE 32/64"		PROD'N. FOR TEST PERIOD OIL—BBL. 338 GAS—MCF. 372 WATER—BBL. -- OIL GRAVITY-API (CORR.) 40.5° API	
FLOW. TUBING PRESS. 75		CASING PRESSURE -0-	
CALCULATED 24-HOUR RATE 338		OIL—BBL. 338 GAS—MCF. 372 WATER—BBL. --	

SIGNED James Bradfield TITLE Drilling Clerk DATE September 14, 1984

*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

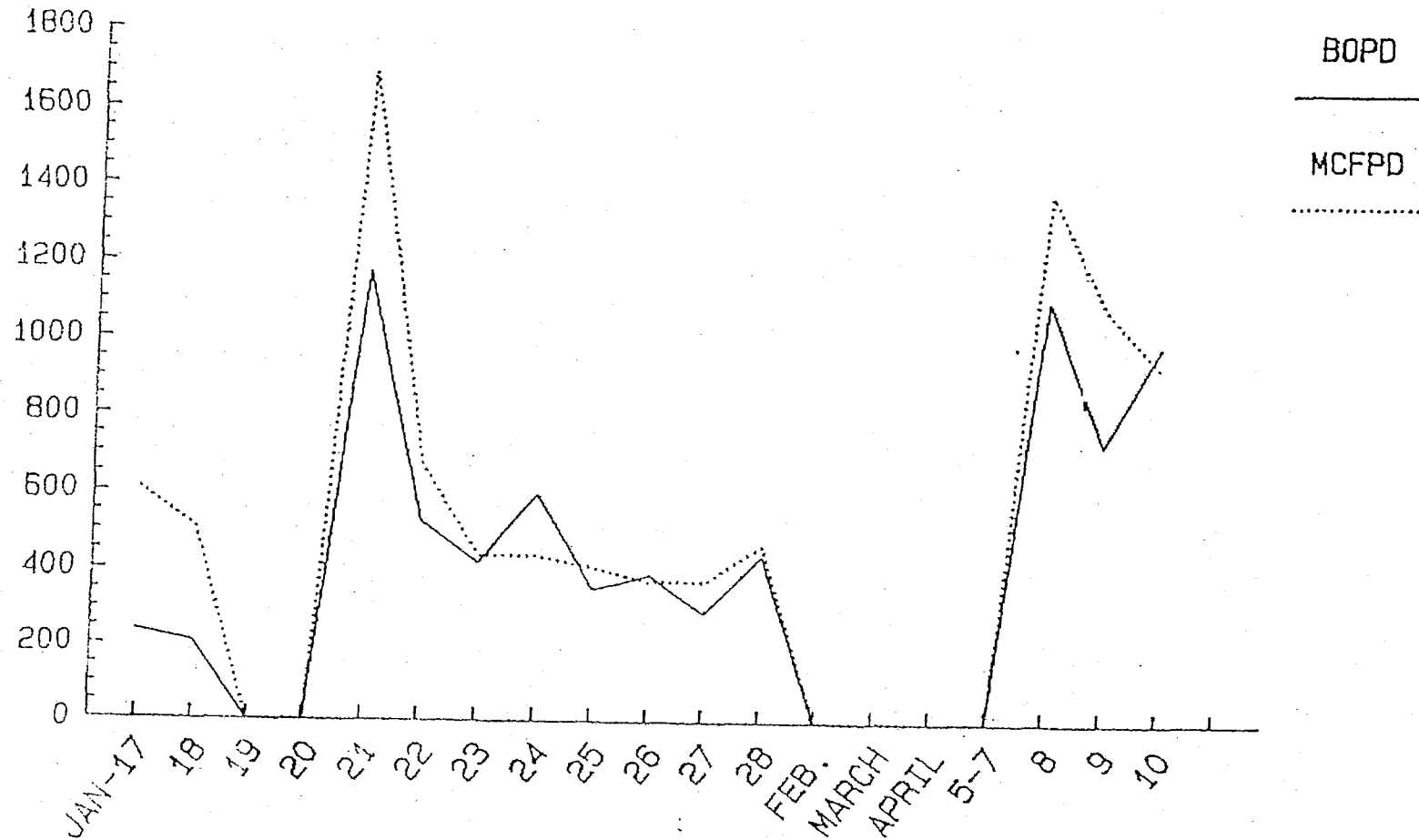
CONFIDENTIAL

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, flow and shut-in pressures, and recoveries):

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Entrada	620'	807'	Orange, fn gr cl unconsolidated rd to sub-rd ss.	Entrada	620'	
Navajo	807'	1513'	Wh to orange frn to cr grn ss, red orange soft wilstone, red to brn soft silty sh	Navajo	807'	
Chinle	1513'	2370'	Rd to rd br sft sh w/occs.thn beds of brn and gry lst	Chinle	1513'	
Shinarump	2370'	2610'	Gry & purple med grn congl. ss inter w/soft brn & grn sh	Shinarump	2370'	
Cutler	2610'	3169'	Rd brn soft anhy sh. shale & siltstn	Cutler	2610'	
DeChelly	3169'	4497'	Wh & orange frn to cr grn frosted quartz ss	DeChelly	3169'	
Hermosa	4497'	5440'	Wh gry & buff fn cryst hd chirty ls	Hermosa	4497'	
Up.Ismay	5440'	5689'	Wh to gry, buff to brn, cryptocrys- stalline to gran, fossiliferous dolomite clean to orgillaceous, silty-earthly limestone w/inter anhydrite and gr to brn cryptocrystalline to grn dolomite.	Up.Ismay	5440'	
				Up.Desert Cr.	5689'	
				Akah	5788'	
Cored Upper Ismay from 5514' to 5574'. DST #1 at TD 5574'. Set DST tool blow of gas to surface at 67 psi. Opened tool for 120 minute flow. Final shut in pressure 1800 psi. cut mud. oil gravity 41.2°API.						
			ISIP 1800 psi. First flow 30 minutes. No cushion. Shut in for 95 minutes. Recovered gas to surface at 85 psi. Pulled drill pipe and recovered 3600' of gas cut oil and 200' of gas			
Desert Creek	5689'	5788'	Lt to dk gry to brn, cryptocrystalline to gran earthy, silty, dolomitc, fossiliferous lms with interbedded anhydrite, and dk gry to brn cryptocrystalline earthy silty dolomites with interbedded anhydrites and carb sh.			

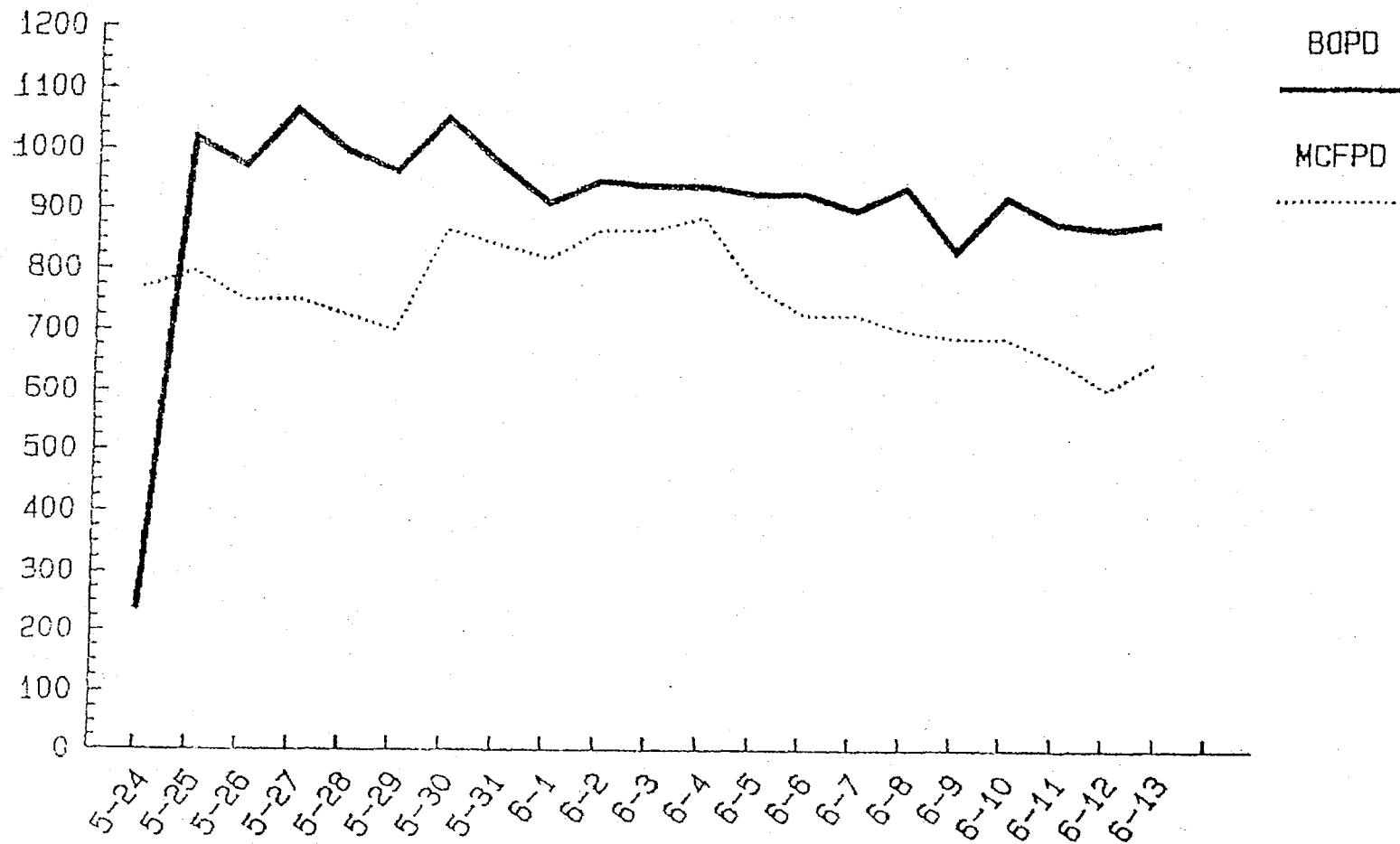
NAVAJO FEDERAL # 4-1
SEC. 4, T 39 S, R 25 E
DESERT CREEK



CUM. OIL 7545.85 BBL
CUM. WATER 216.5 BBL
CUM. GAS 9852 MCF

TIME

NAVAJO FEDERAL 4-1
SEC. 4, T 39 S, R 25 E
UPPER ISMAY

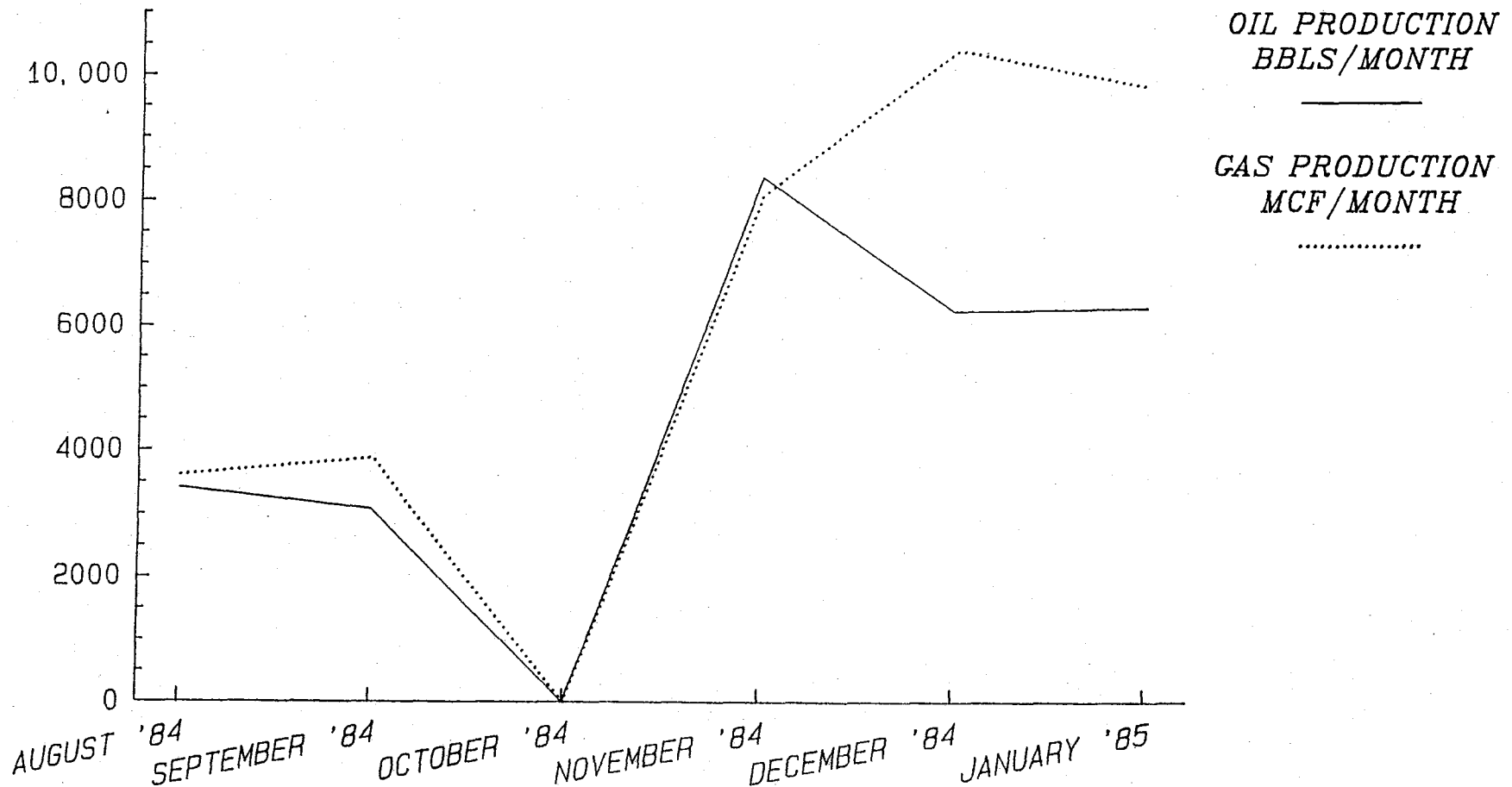


CUM. OIL 18715.24 BBL.
CUM. WATER 397 BBL
CUM. GAS 14636 BBL

TIME

NAVAHO FEDERAL 9-1
SECTION 9 39S 25E
UPPER ISMAY

PRODUCTION (BBLs & MCF)

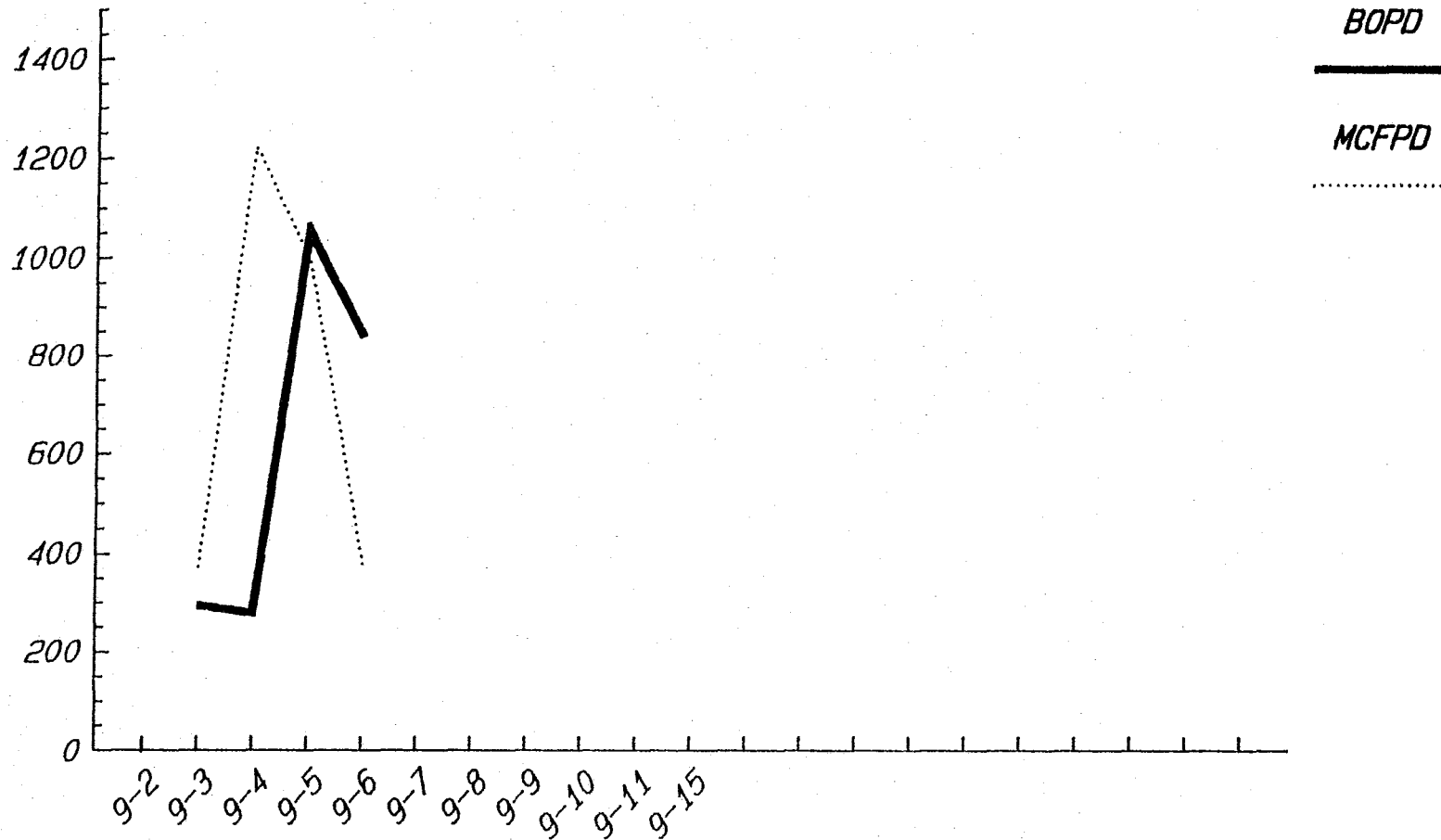


CUM. OIL 27366 BBLs.
CUM. WATER 54 BBLs.
CUM. GAS 35746 MCF.

TIME

NAVAJO FEDERAL 4-2
Section 4, T. 39 S., R. 25 E.
Upper Ismay

PRODUCTION



Cum. Oil 2044 BBLS
Cum. Water 657 BBLS.
Cum. Gas 4511 MCF

SEPTEMBER 1985

EL PASO NATURAL GAS COMPANY
 SAN JUAN DIVISION ABSORPTION PLANTS
 HYDROCARBON ANALYSIS
 CHROMATOGRAPHIC ANALYSIS (MEAN AVERAGE @ 14.696 PSI & 60 DEG.F)

6/20/85

JUNE 1985

SPECIFIC GRAVITY= .856

AV. HIGH BTU/CF= 1448.1

ANAL	43683	AVERAGE	
DATE	6/16/85	MOL %	GAL/MCF
		*****	*****

Both Ismay and Desert Creek

H2S	0.000	0.000	0.000	H2S
CO2	0.441	0.441	0.000	CO2
N2	1.247	1.247	0.000	N2
C1	64.475	64.475	0.000	C1
C2	17.098	17.098	0.000	C2
C3	10.170	10.170	2.792	C3
IC4	1.190	1.190	0.388	IC4
C4	3.042	3.042	0.956	C4
IC5	0.608	0.608	0.222	IC5
C5	0.787	0.787	0.284	C5
C6	0.942	0.942	0.386	C6

TOTAL 100.000 100.000 5.028

REMARKS: MERIDIAN OIL NAVAJO FEDERAL 4-1 (SEC. 4 T. 39 R. 25)
 COUNTY-SAN JUAN UTAH.

DISTRIBUTION: Hermon E. MCANALLY

NARVAEZ/4-83/1-85

EL PASO NATURAL GAS COMPANY
 SAN JUAN DIVISION ABSORPTION PLANTS
 HYDROCARBON ANALYSIS
 CHROMATOGRAPHIC ANALYSIS (MEAN AVERAGE @ 14.696 PSI & 60 DEG.F)

1/31/85
 JANUARY 1985

SPECIFIC GRAVITY= .68
 AV. HIGH BTU/CF= 1147.1

ANAL 43056 AVERAGE
 DATE 1/30/85 MOL % GAL/MCF

Desert Creek

H2S	0.000	0.000	0.000	H2S
CO2	1.103	1.103	0.000	CO2
N2	1.938	1.938	0.000	N2
C1	80.909	80.909	0.000	C1
C2	11.276	11.276	0.000	C2
C3	3.667	3.667	1.007	C3
IC4	0.276	0.276	0.090	IC4
C4	0.591	0.591	0.186	C4
IC5	0.080	0.080	0.029	IC5
C5	0.094	0.094	0.034	C5
C6	0.066	0.066	0.027	C6

TOTAL 100.000 100.000 1.373

REMARKS: MILESTONE PET. NAVAJO FEDERAL 4-1. (WELL WAS SHUT IN.)

DISTRIBUTION: Loren Fothergill
 File

NARVAEZ/4-83/1-85

EL PASO NATURAL GAS COMPANY
SAN JUAN DIVISION
HYDROCARBON ANALYSIS

DATE OF RUN: SEPTEMBER 11, 1984.

SAMPLE FROM: EL PASO EXPLORATION

SAMPLE MARKED: MILESTONE NAVAJO FED. 9-1

ANALYSIS NUMBER: 42387

DATE SECURED: SEPTEMBER 10, 1984.

SECURED BY: JOE BARNETT

COMPONENT	MOL%	G. P. M.
CARBON DIOXIDE	.086	
HYDROGEN SULFIDE	TRACE	
NITROGEN	1.084	
METHANE	56.358	
ETHANE	17.436	
PROPANE	13.753	3.7752
I-BUTANE	1.851	.60391
N-BUTANE	4.892	1.5379
I-PENTANE	1.071	.39102
N-PENTANE	1.45	.52403
HEXANES+	2.019	.87863
TOTAL	100	7.7107
SPECIFIC GRAVITY:	.50498	+ .47247 = .977 TOTAL
B. T. U.	1648.3	

BY: CADMIUM SULFATE--H₂S=.166gr/100SCF, RSH=.117gr/100SCF
RUN BY: SANDRA ARAGON CHECKED BY: GREG KARDOS

CHROMATOGRAPHIC ANALYSIS (MEAN AVERAGE @14.696PSI & 60 DEG. F.)

DISTRIBUTION: L. FOTHERGILL
FILE

LOCATION AND WELL DATA

SEC. NE 9 T. 39S R. 25E
COUNTY: SAN JUAN
STATE: UTAH
FORMATION: UPPER ISMAY
BOMB PRESSURE: LINE

KARDOS 9/83

GCK

PCAM 7113 - N 1-84

MATRIX NUMBER	TA	KIND	DATE	TIME
71	1816	990	1/14/85	14:36

SAMPLE TITLE

CC

DISTRIB

BUTION

BEST COPY AVAILABLE

SPECTROMETER ANALYSIS RESULTS

REFINERY

LABORATORY

PHILLIPS, TEXAS

COMPONENTS	MOLE %	WGT %	DATE	TYPE GAS	STATE	COUNTY	FIELD	FORMATION	COMPANY	WELL	LEASE	SEC	SAMPLER	ATMOS. TEMP	GAS TEMP	H ₂ S	
HELIUM	0.02	0.01	0.00	1/11/85	Casinghead	Utah	San Juan	Turner Bluff	U. Ismay	Milestone Petrol	No. 9-1	Navajo Fed.	9-3DS-25E	D. L. Franklin	350	500	Trace
NITROGEN	1.39	0.73	1.57														
CO2	0.04	0.03	0.07														
OXYGEN	0.00	0.00	0.00														
METHANE	63.87	34.02	41.30														
ETHANE	17.50	22.49	21.21														
PROFANE	10.73	14.24	19.10														
ISOBUTANE	1.25	1.97	2.94														
N BUTANE	3.18	4.82	7.43														
ISOPENTANE	0.59	1.04	1.73														
N PENTANE	0.70	1.22	2.04														
HEXANES PLUS	0.71	1.42	2.40														
UNKNOWN	0.00	0.00	0.00														
TOTAL	100.00	100.00	100.00														
GAS SP GRAVITY	24.81	3.13															
GROSS BTU CU FT	1405.075	DRY @	14.696 F														
GROSS BTU CU FT	1429.611	WET @	14.696 F														
GROSS BTU CU FT	1427.144	WET @	14.650 F														
GROSS BTU CU FT	1423.354	WET @	14.733 F														
NET BTU CU FT	1323.283	DRY @	14.696 F														
GALLONS/1000 CU. FT.																	
ETHANE	4.666	ISOPENTANE	0.217														
PROFANE	2.930	N PENTANE	0.233														
ISOBUTANE	0.402	HEXANES PLUS	0.297														
N BUTANE	1.000																
APPROVED	DLF:bnc																

APPROVED DLF:brs

RC - PPG - BORGER SPECTRO LAB

POOR COPY

Company MERIDIAN OIL INC. Formation UPPER ISMAY
Well NAVAJO FEDERAL 4-2 County SAN JUAN
Field _____ State UTAH

HYDROCARBON ANALYSIS OF: DST #1

<u>Component</u>	<u>Mol Percent</u>	<u>GPM</u>
Carbon Dioxide	.06	
Nitrogen	1.28	
Methane	68.90	
Ethane	17.28	4.594
Propane	8.08	2.210
iso-Butane	.92	.299
n-Butane	2.19	.686
iso-Pentane	.45	.163
n-Pentane	.61	.219
Hexanes Plus	.23	.098
	<u>100.00</u>	<u>8.269</u>

Calculated gas gravity (air = 1.000) = .793

Calculated gross heating value = 1356 BTU per
cubic foot of dry gas at 14.65 psia and 60°F.

Collected at 50 psig

Date Sampled : 8-7-85

CORE LABORATORIES, INC.

Reservoir Fluid Analysis

Page 1 of 1File ARFL-850127Company Meridian Oil, Inc.Formation Upper IsmayWell D.S.T. No. 1County San JuanField Wildcat Navajo Fed 4-2 4-39S-25EState UtahHYDROCARBON ANALYSIS OF D.S.T. FLUID SAMPLE

Component	Mol Percent	Weight Percent	Density Gm/cc	°API Gravity @ 60°F.	Molecular Weight
Hydrogen Sulfide	0.00	0.00			
Carbon Dioxide	0.00	0.00			
Nitrogen	0.00	0.00			
Methane	trace	0.00			
Ethane	0.13	0.02			
Propane	1.06	0.24			
iso-Butane	0.33	0.10			
n-Butane	1.40	0.42			
iso-Pentane	1.29	0.48			
n-Pentane	2.75	1.02			
Hexanes	5.99	2.59			
Heptanes	12.35	6.10			
Octanes	13.68	7.53			
Nonanes	10.23	6.37			
Decanes	8.38	5.78			
Undecanes plus	42.41	69.35	0.8740	30.2	318
	100.00	100.00			

Properties of Heptanes plus Fraction

Density, gm/cc @ 60°F. 0.8369
°API @ 60°F. 37.4
Molecular Weight 212

Very truly yours,

CORE LABORATORIES, Inc.

Craig L Bromley
Craig L Bromley
Reservoir Fluid Supervisor

CLB/MWO/sso

5 cc Ms. Cindy L. Crawley

Meridian Oil, Inc.

5613 D.T.C. Parkway

Englewood, CO 80111

To: Lee Scherer

Date: October 18, 1985

From: Ted Roney *TR*

Location: Billings, MT

Attached is a preliminary layout of the proposed reinjection facilities for the Kiva Field in southeastern Utah. Also included is a topo map with the three wells identified.

The proposed reinjection facilities would include a refrigeration skid to strip the liquids from the produced gas. The dry gas would then be compressed to the required pressure for reinjection. As indicated a flare, product storage and a loading rack are needed. The flare is required for safety. The product storage and loading rack are to handle the liquids stripped from the gas, which will be trucked out of the area.

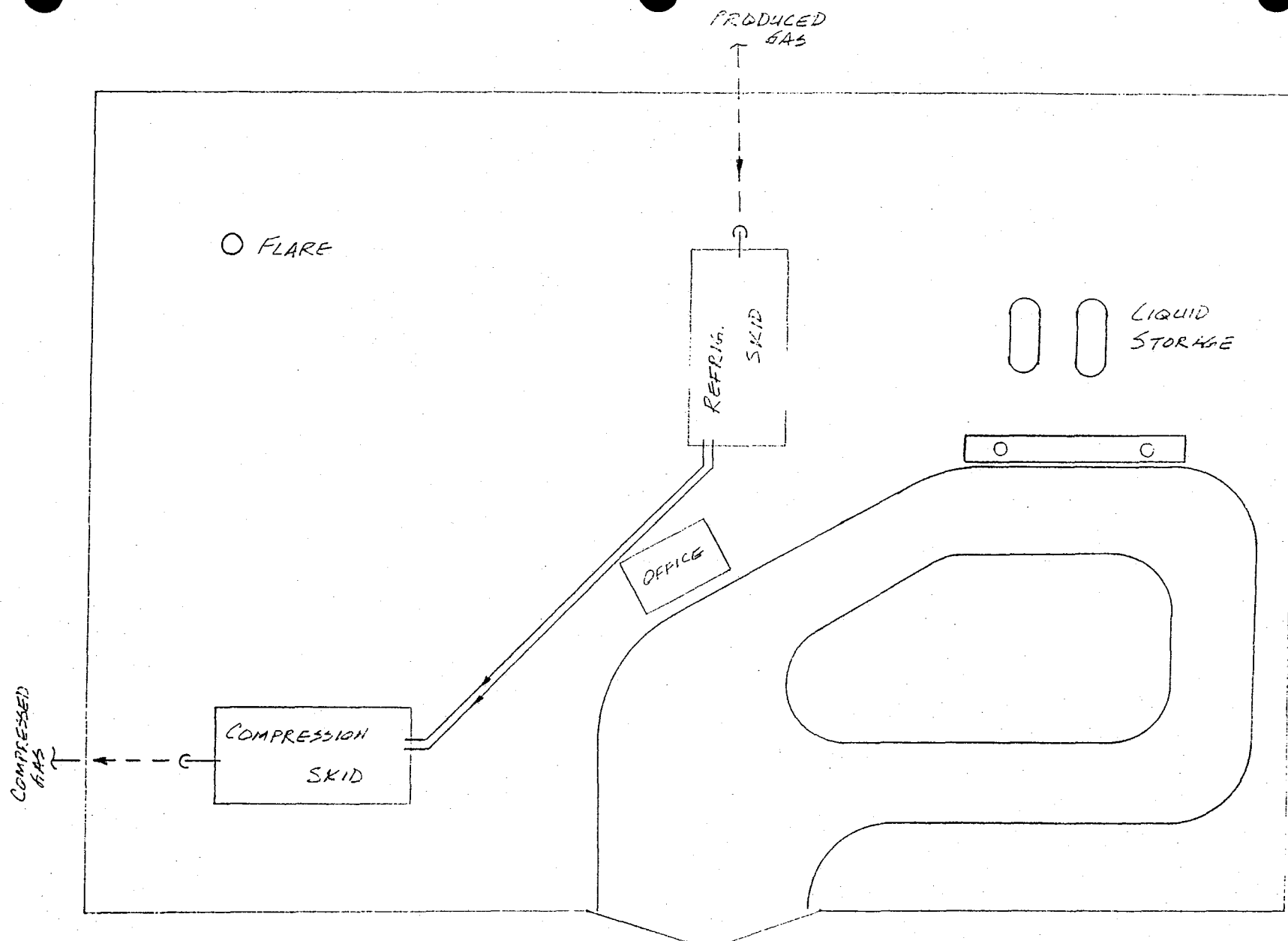
A low pressure system will be used to gather the gas to the reinjection facilities. The facilities will be located near to Well 4-2 to minimize the length of the high pressure reinjection line.

The gas will be accounted for by measuring the produced gas from each lease, the reinjected gas and the liquids sold. Part of the gas will be consumed as fuel by the reinjection facilities.

Over the next few weeks we will obtain additional information pertaining to the specific equipment required to handle this project.

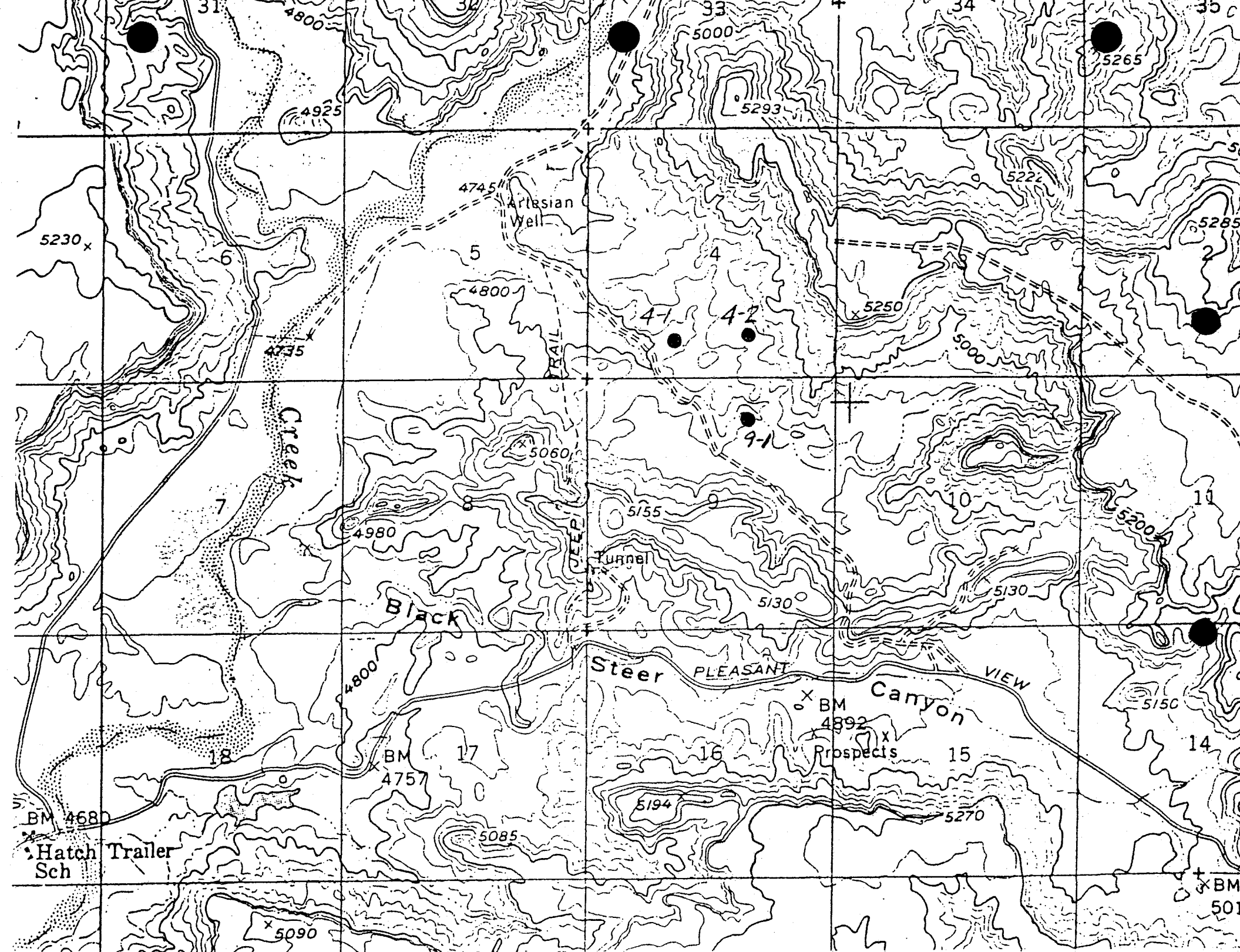
PTR/tbk

cc: T. F. Freers



KIVA FIELD

PRELIMINARY LAYOUT REINJECTION FACILITIES



WILSON

FORM 432-2

SERVICE COMPANY

TEMPERATURE SURVEY

COMPANY Meridian Oil/ El Paso Natural GasWELL 4-2 LEASE Navajo FederalCOUNTY San Juan STATE New MexicoSEC. SW 4 TWP. 39S RGE. 25EAPPROX. TOP CEMENT 1500'Survey Begins at 1000' Ft. Ends at 5802' Ft.

Approx. Fill-Up _____ Max. Temp. _____

Log Measured From KB Run No. 1

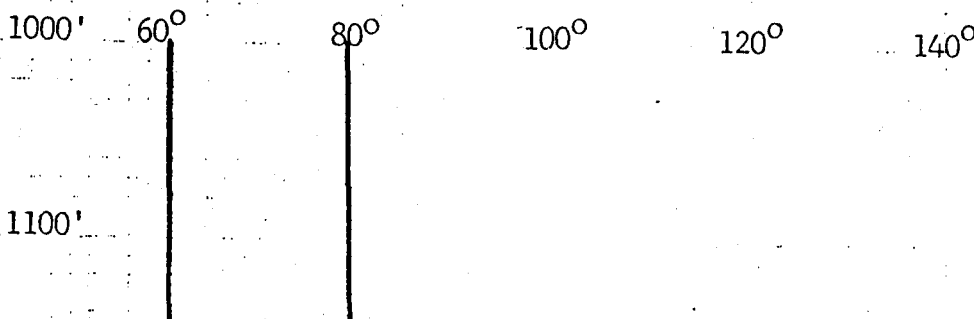
Casing Size	Casing Depth	Diam of Hole	Depth
<u>5 1/2"</u> from _____ to _____		from <u>7 7/8"</u> to _____	
from _____ to _____		from _____ to _____	

Date of Cementing 8/11/85 Time 4:15 pmDate of Survey 8/11/85 Time 11:15 pmAmount of Cement As Per ReportRecorded by Ebert Witnessed by _____

REMARKS OR OTHER DATA

EC 5802' Int Csg 3000'

TEMPERATURE IN DEGREES FAHRENHEIT



1200'

1300'

1400'

1500'

Anomaly at 1500'

1600'

1700'

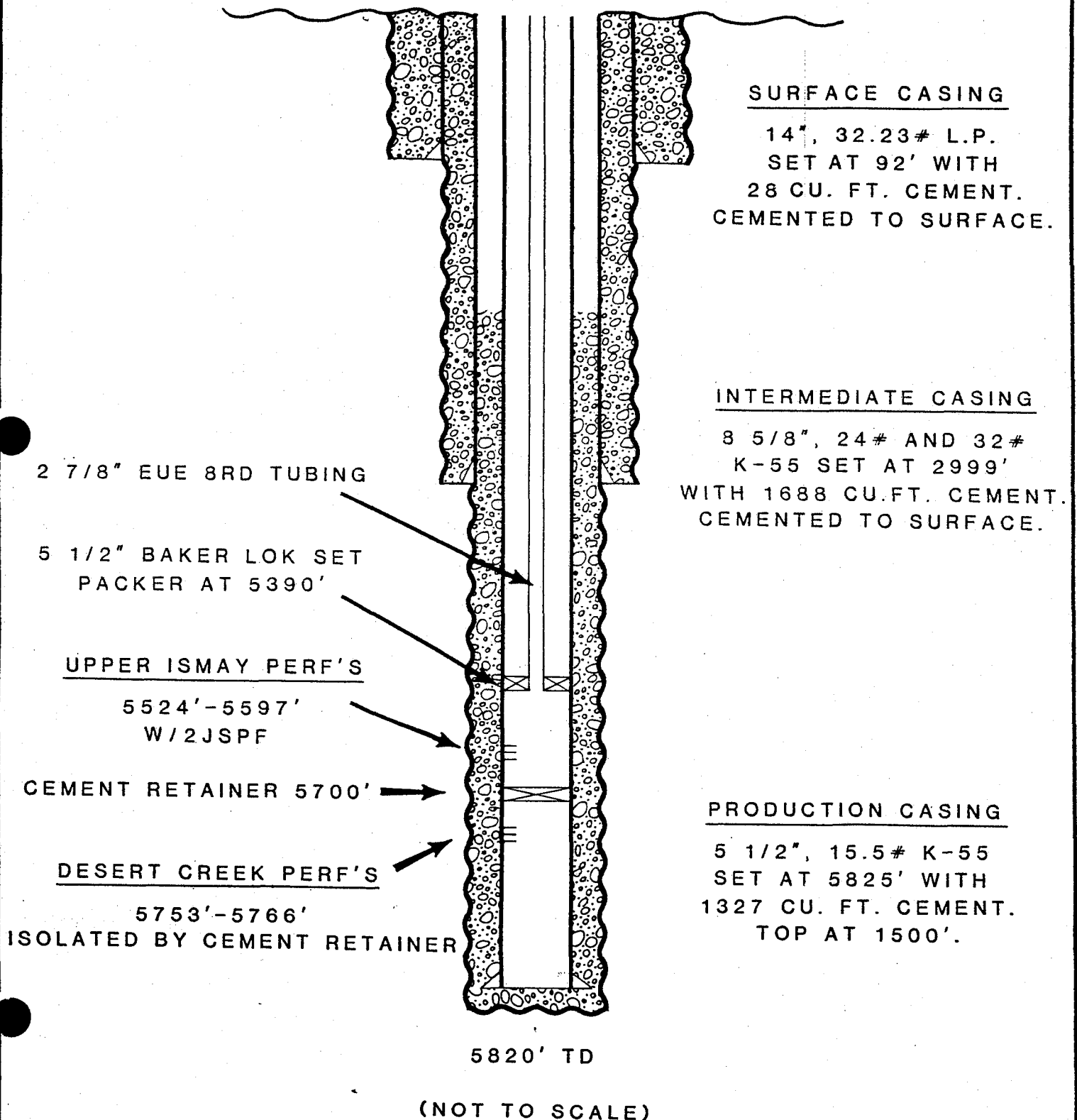
1800'

1900'

2000'

MERIDIAN OIL
PROPOSED GAS INJECTION WELL
Navajo Federal #4-2
SW SE SECTION 4, T 39 S, R 25 E
SAN JUAN COUNTY, UTAH

WELLBORE SCHEMATIC DIAGRAM



Schlumberger

DIRECTIONAL LOG

COMPUTER DATA

COUNTY San Juan
 FIELD Kiva
 LOCATION Navajo Federal #4-2
 WELL Navajo Federal #4-2
 COMPANY Meridian Oil, Inc.

COMPANY Meridian Oil, Inc.
 WELL Navajo Federal #4-2
 FIELD Kiva
 COUNTY San Juan STATE Utah

LOCATION 300' FSL & 2225' FWL
 API SERIAL NO. SEC. TWP. RANGE
4 39S 25E

Other Services:
 DLL
 LDT CNL
 BHC
 EPT

Permanent Datum: GL; Elev.: 4863
 Log Measured From KB, 14 Ft. Above Perm. Datum
 Drilling Measured From KB

Elev.: K.B. 4878
 D.F. 4877
 G.L. 4864

Date	8-11-85				
Run No.	One				
Depth-Driller	5820				
Depth-Logger	5826				
Btm. Log Interval	5826				
Top Log Interval	2997				
Casing-Driller	8-5/8 @ 2999	@	@	@	@
Casing-Logger	2997				
Bit Size	7-7/8				
Type Fluid in Hole	L.S.N.D.				
Dens.	9.3	34.0			
pH	Fluid Loss	10.0	15.0 ml	ml	ml
Source of Sample	Flowline				
Rm @ Meas. Temp.	.150 @ 80°F	@ °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	.135 @ 80°F	@ °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	.220 @ 80°F	@ °F	@ °F	@ °F	@ °F
Source: Rmf Rmc	Meas Calc				
Rm @ BHT	.098 @ 126°F	@ °F	@ °F	@ °F	@ °F
Circulation Stopped	NA				
Logger on Bottom					
Max. Rec. Temp.	126°F	°F	°F	°F	°F
Equip.	Location	8174	Farm.		
Recorded By	T. Weaver				
Witnessed By	D. Meade				

The well name, location and horizontal reference data were furnished by the customer.

END HERE

EXACT RADIUS OF CURVATURE METHOD

TIE-IN LOCATION

MEASURED DEPTH	2997.0	FT
TRUE VERTICAL DEPTH	2997.0	FT
DISTANCE NORTH	0.0	FT
DISTANCE EAST	0.0	FT

BOTTOM HOLE LOCATION

COURSE LENGTH	27.8	FT
COURSE AZIMUTH	26.2	DEG
MEASURED DEPTH	5816.0	FT
TRUE VERTICAL DEPTH	5815.8	FT
DISTANCE NORTH	25.0	FT
DISTANCE EAST	12.3	FT

REF RMCC.17300

Schlumberger

BOREHOLE COMPENSATED SONIC

CSU

COMPANY: MILESTONE OIL INC.
WELL: NAVAJO FEDERAL #4-2
FIELD: KIYA
COUNTY: SAN JUAN
STATE: UTAH
NATION: U.S.A.
LOCATION: 300 FSL & 2225 FEL

SEC: 4 TWP: 39S RGE: 25E

PERMANENT DATUM: GL
ELEV. OF PERM. DATUM: 4859.0 F
LOG MEASURED FROM: KB
14.0 F ABOVE PERM. DATUM
DRLG. MEASURED FROM: KB

ELEVATIONS-
KB: 4873.0 F
DF: 4877.0 F
GL: 4859.0 F

DATE: 10 AUG 85
RUN NO: 1

DEPTH-DRILLER: 5820.0 F
DEPTH-LOGGER: 5826.0 F
BTM. LOG INTERVAL: 5820.0 F
TOP LOG INTERVAL: 2997.0 F

CASING-DRILLER: 2999 F
CASING-LOGGER: 2997 F
CASING: 8 5/8

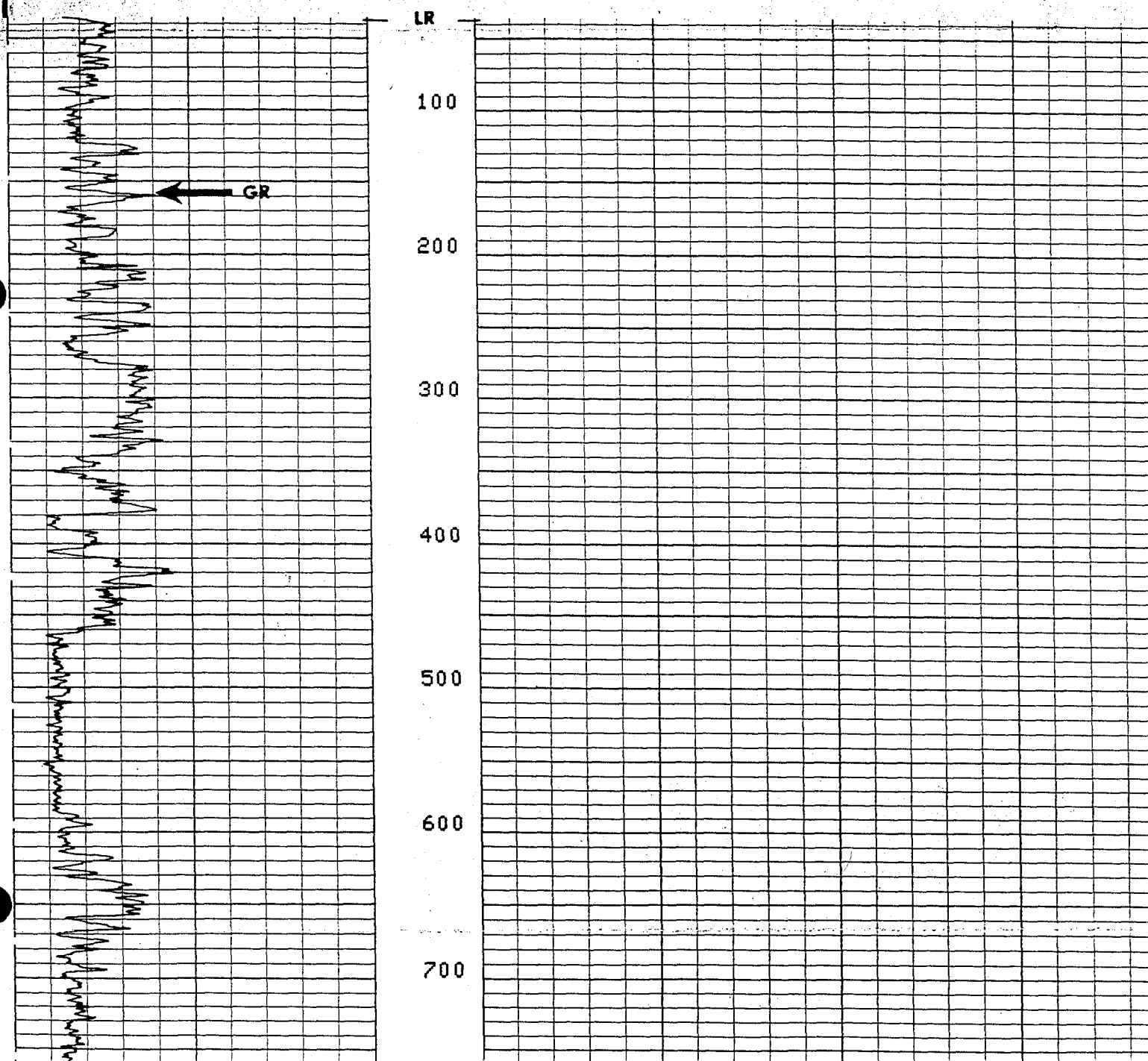
BIT SIZE: 7 7/8
DEPTH: 5820 F

JREMENTS AND WE CANNOT, AND DO NOT GUARANTEE THE ACCURACY OR
 OF ANY INTERPRETATIONS, AND WE SHALL NOT, EXCEPT IN THE CASE
 WILLFUL NEGLIGENCE ON OUR PART, BE LIABLE OR RESPONSIBLE FOR
 ISTS, DAMAGES OR EXPENSES INCURRED OR SUSTAINED BY ANYONE
 FROM ANY INTERPRETATION MADE BY ANY OF OUR OFFICERS, AGENTS OR
 THESE INTERPRETATIONS ARE ALSO SUBJECT TO OUR GENERAL TERMS
 ONS AS SET OUT IN OUR CURRENT PRICE SCHEDULE.

FILE 11 10-AUG-85 22:12
 DATA ACQUIRED 10-AUG-85 21:25

GR (GAPI)				
0.0	200.00			
CALI(IN)			DT (US/F)	
6.0000	16.000			
		140.00		40.0

FILE 4 10-AUG-85 18:52



600

700

800

900

1000

1100

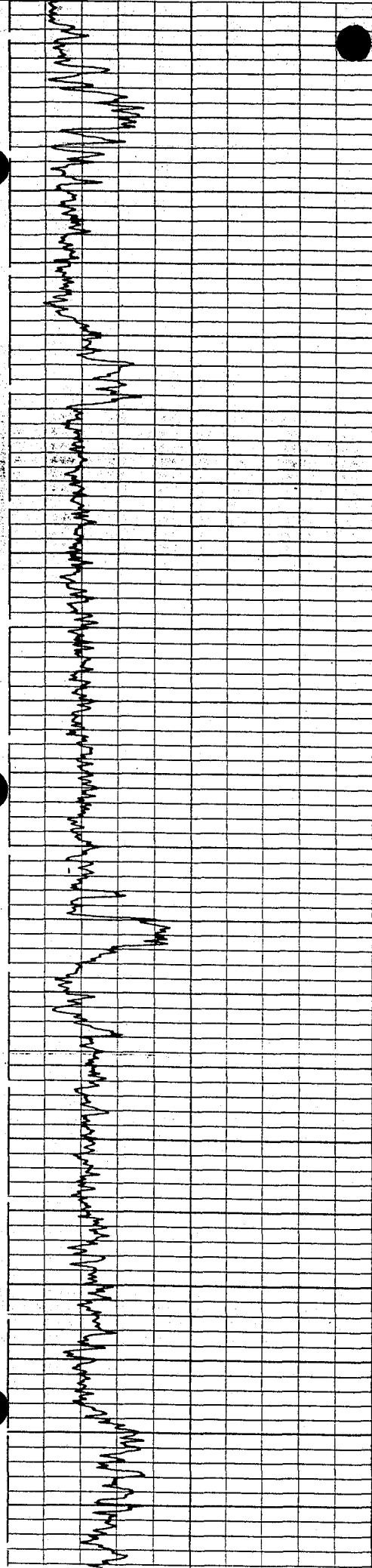
1200

1300

1400

1500

1600



1500

1600

1700

1800

1900

2000

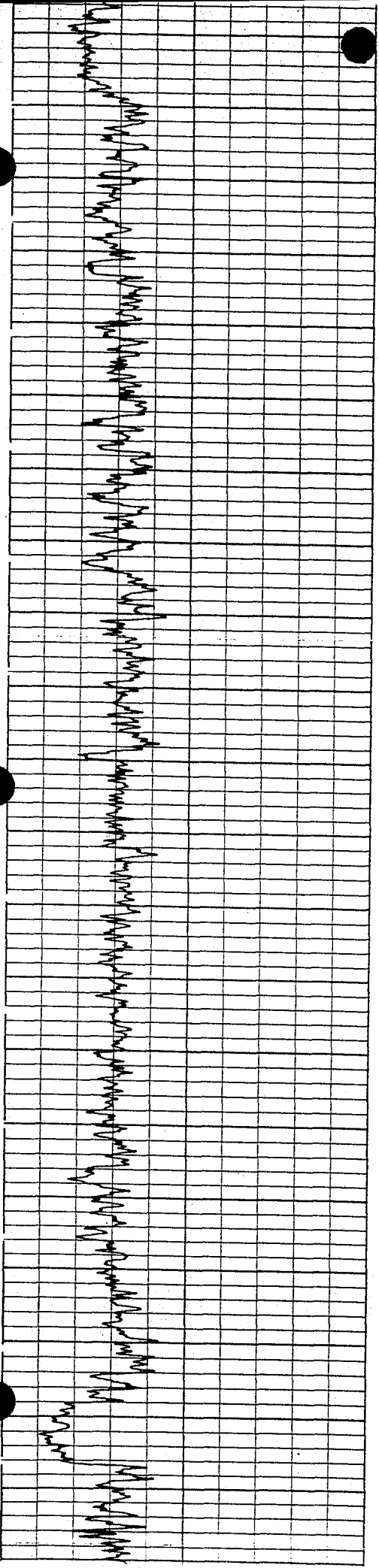
2100

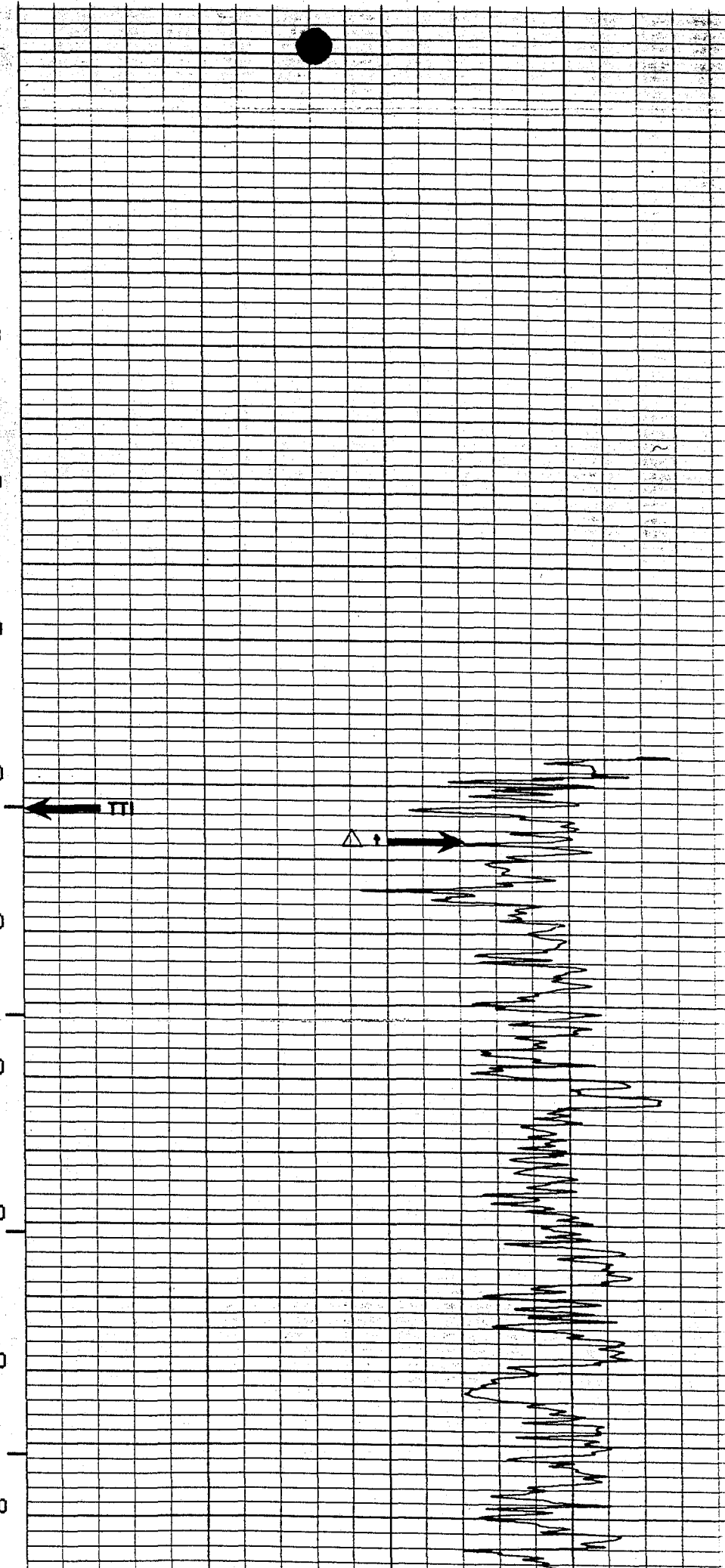
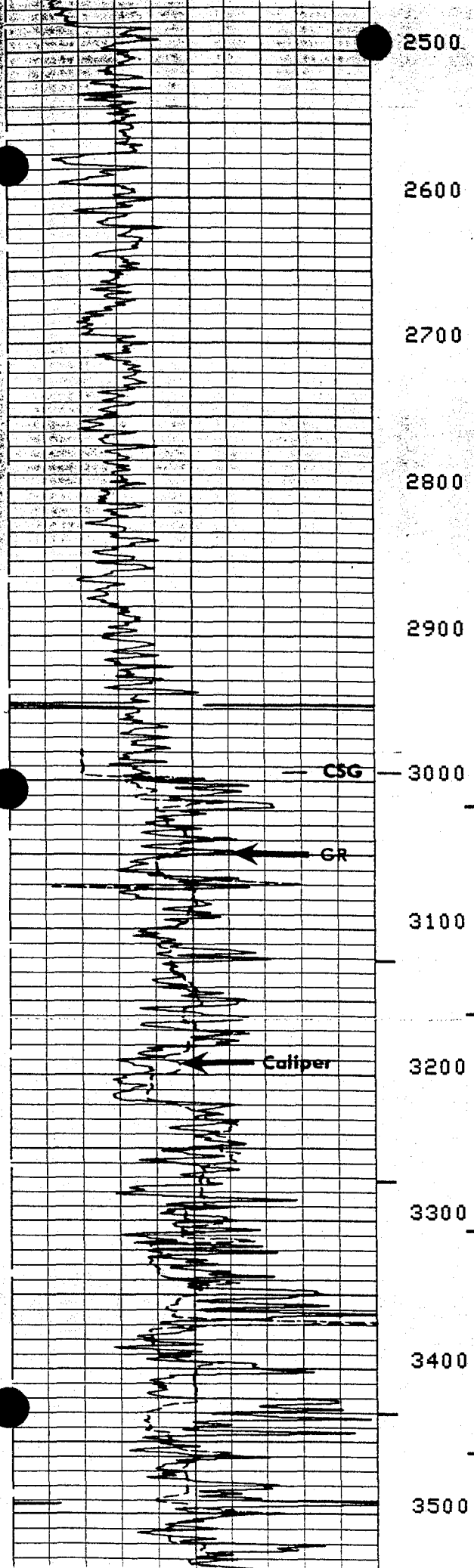
2200

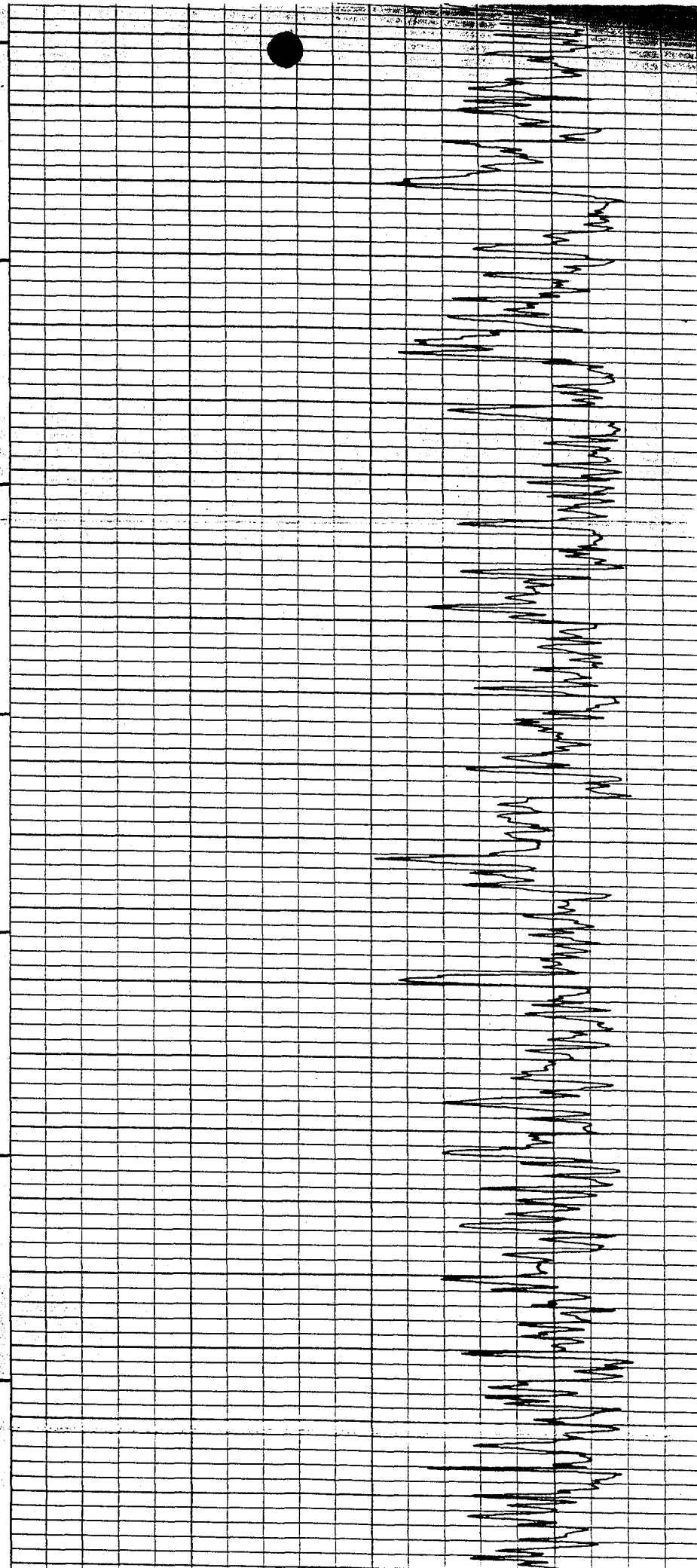
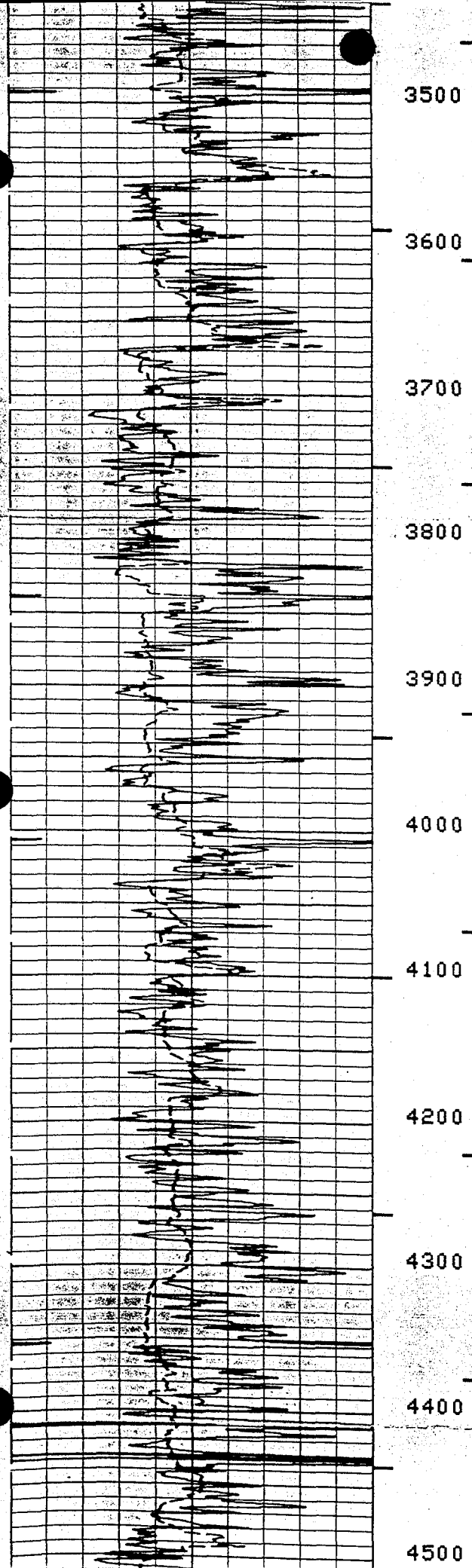
2300

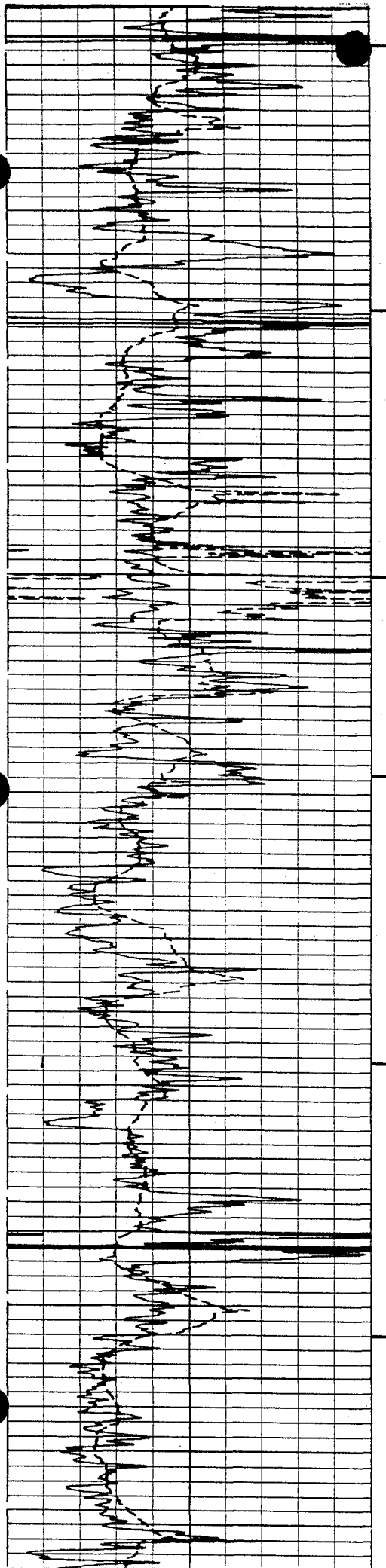
2400

2500

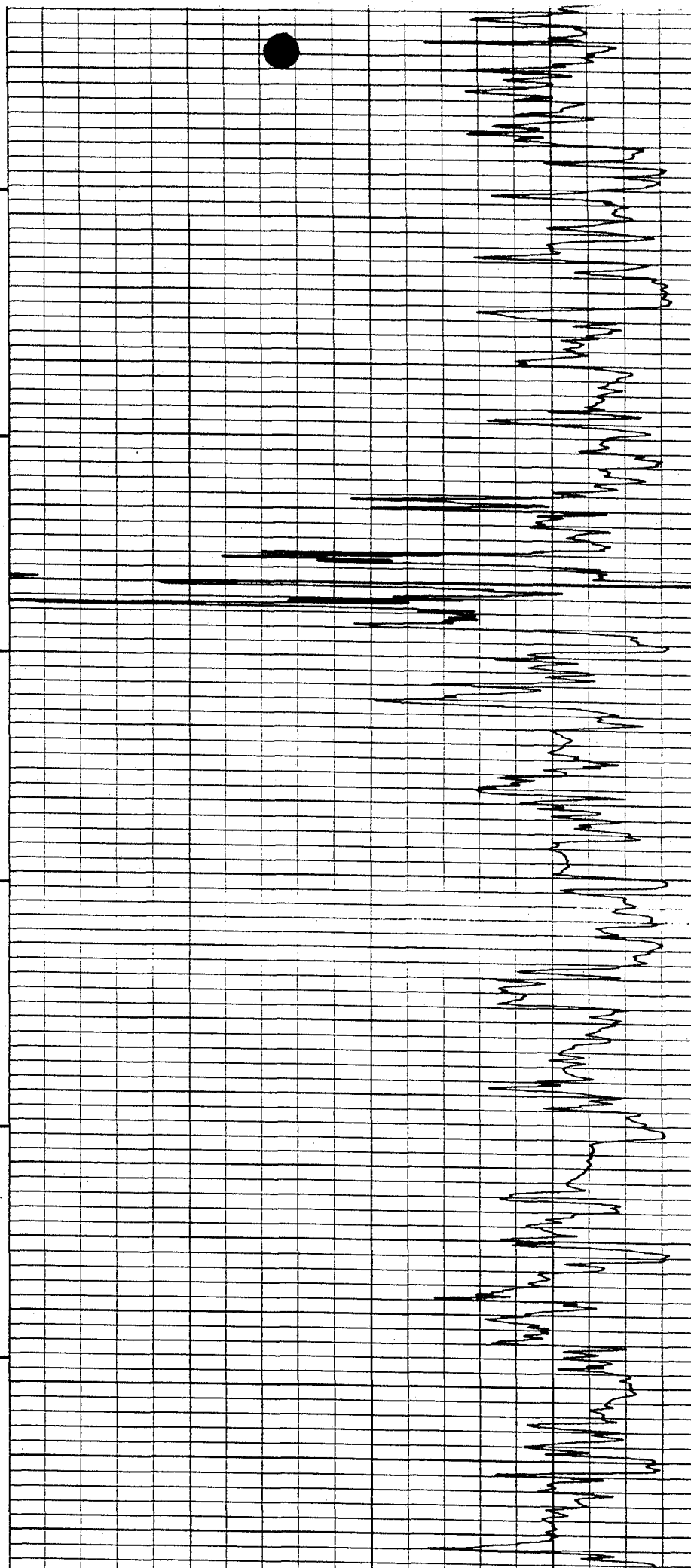


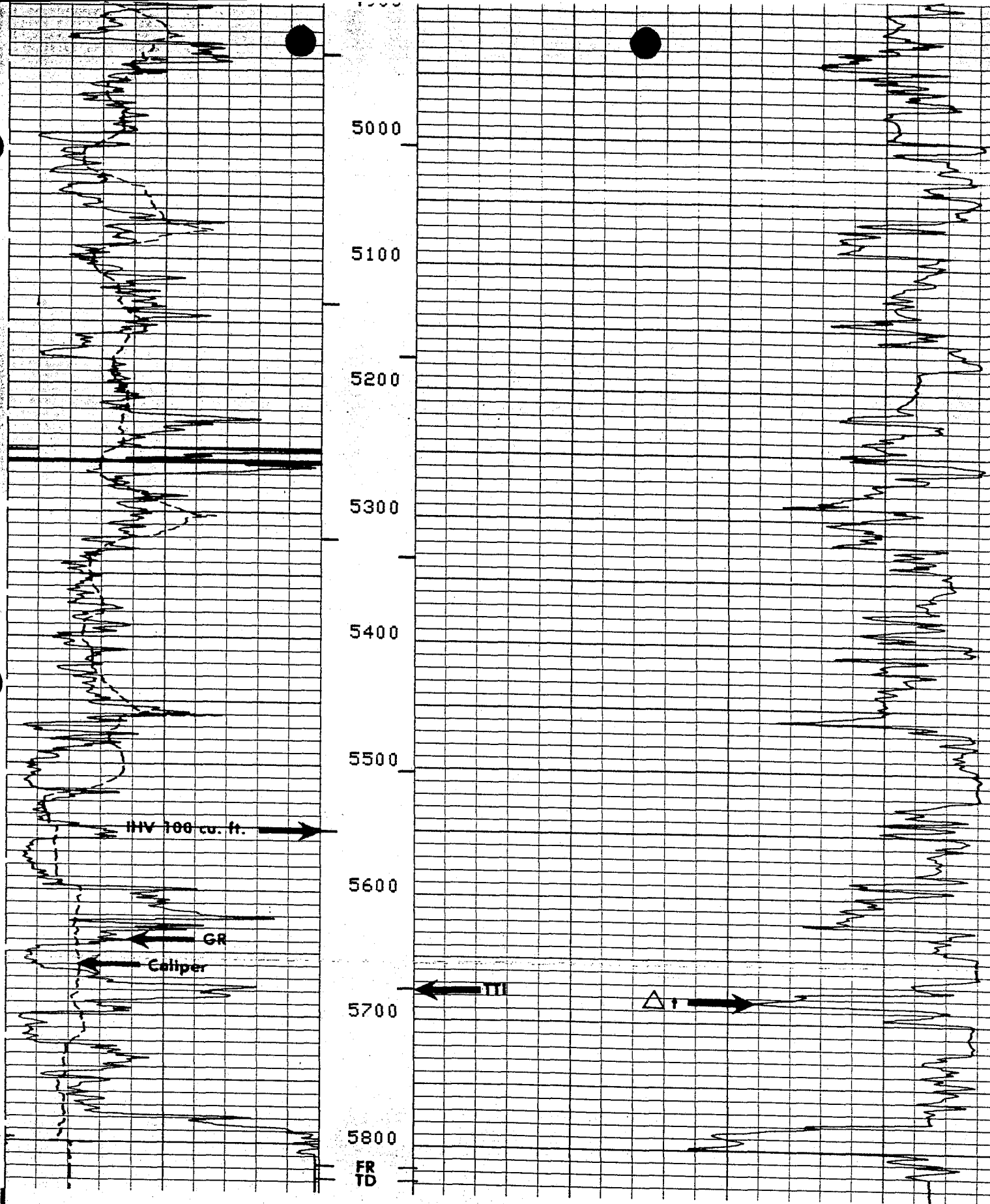






4500
4600
4700
4800
4900
5000
5100
5200
5300
5400





FILE

4

10-AUG-85 17:32

GR (GAPI)

0.0 200.00

CALI(IN)

6.0000 16.000

DT (US/F)

140.00

LEASE INFORMATION

The Navajo Federal 4-1, 4-2 and 9-1 wells are all subject to the same base Federal Lease U-52333. The lease ownership and acreage are as follows:

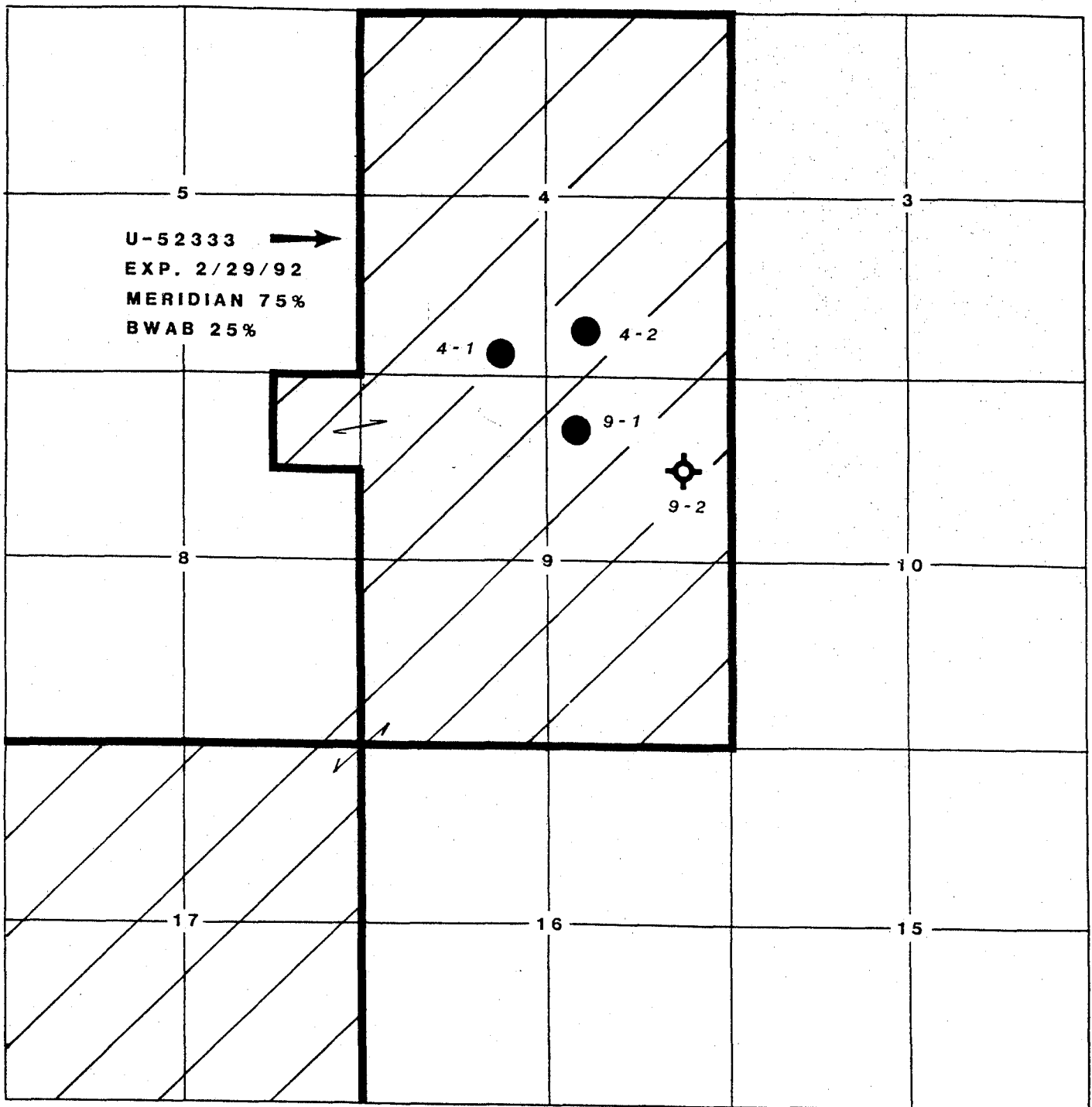
Ownership

Meridian Oil Inc. (Formerly Milestone Petroleum)	75.0% WI
BWAB 1984-1986 Joint Venture	25.0% WI
U.S. Government	12.5% Royalty
Dale Toney et al	5.0% ORRI

Acreage

All of Sections 4, 9, 17, 20	T39S, R25E
NE/4 NE/4, Section 8	T39S, R25E
E/2 Section 13	T39S, R25E

R 25 E



MERIDIAN OIL

KIVA FIELD

T 39 S, R 25 E

SAN JUAN COUNTY, UTAH

ACREAGE IN THE E/2 OF SEC. 13 AND SEC. 20 NOT SHOWN

NW

KIVA FIELD

MILESTONE

NAVAJO FEDERAL 4-1
370 FSL 1940 FWL
4-T39S-R25E

MILESTONE

NAVAJO FEDERAL 4-2
300 FSL 2225 FEL
4-T39S-R25E

MILESTONE

NAVAJO FEDERAL
770 FNL 201
9-T39S-R2

← 1100' →

← 1050' →

UPPER ISMAY
FARO 1056 BOPD + 750 MCFG
DESERT CREEK
FARO 980 BOPD + 2.5 MMCFGPD
LDT- CNL KB 4868

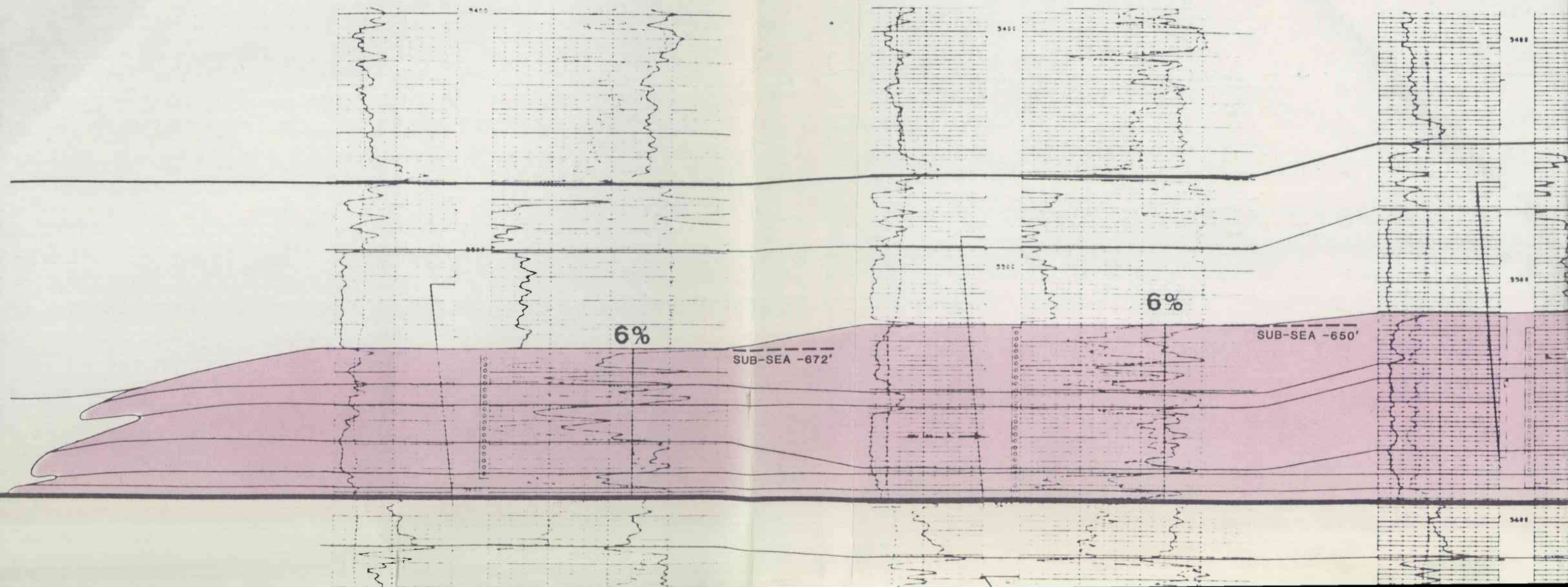
UPPER ISMAY
FARO 961 BOPD + 1890 MMCFG

UPPER ISMAY
FARO 475 BOPD +

32/64" FTP 100 psi

LDT- CNL KB 4873

FDO



SE

NE

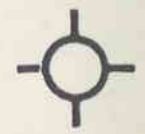
AL 9-1
D FEL
5E

MAY
600 MCFG

-CNL KB 4851

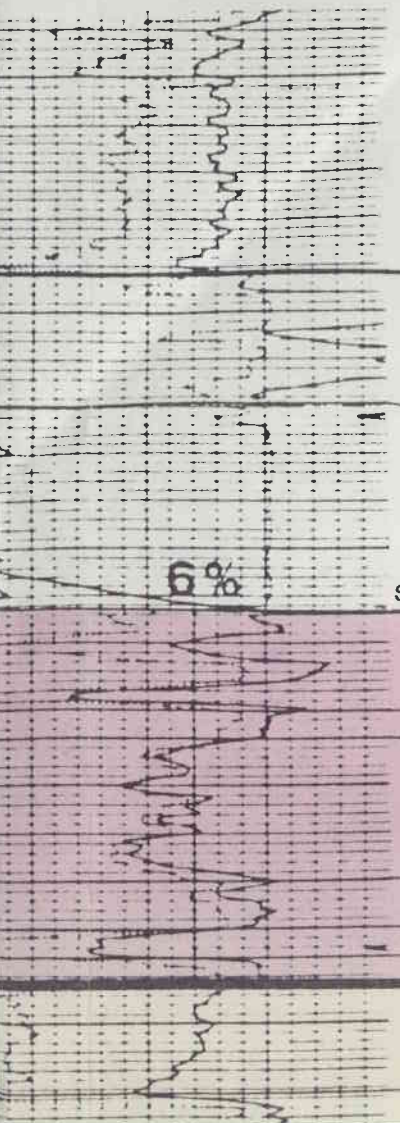
MILESTONE

NAVAJO 9-2
1320 FNL 600 FEL
9-T39S-R25E

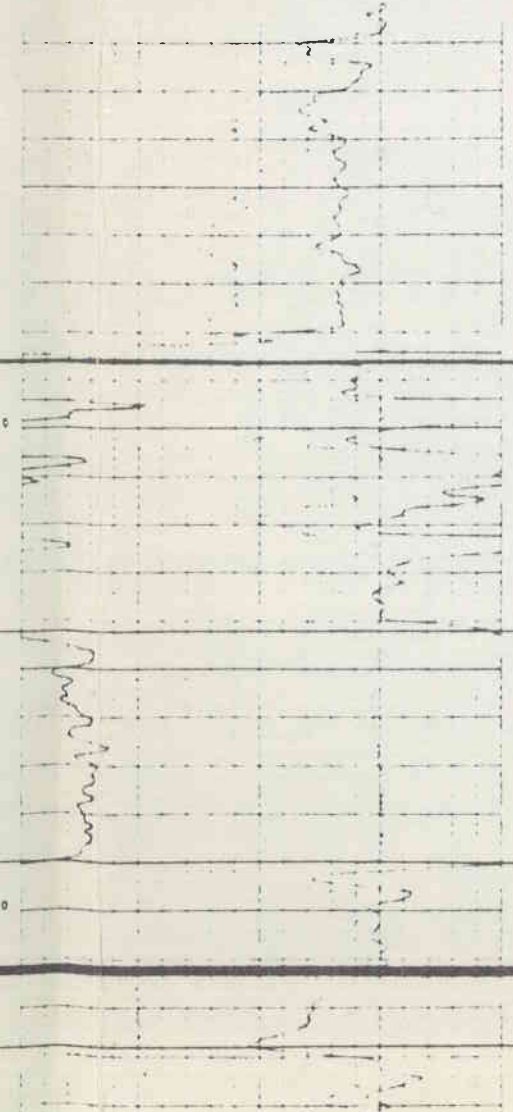
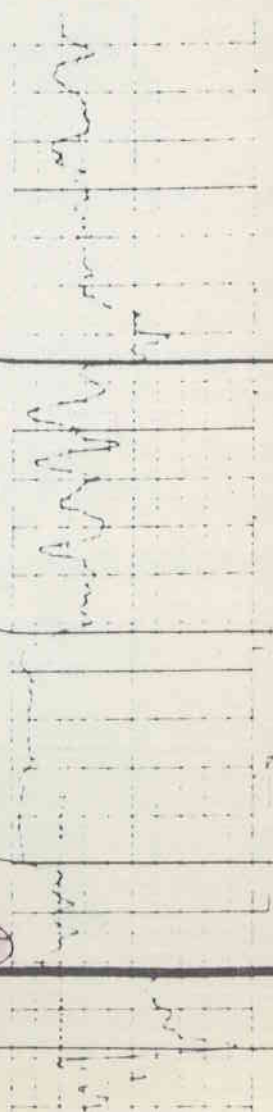


← 1500' →

FDC-CNL KB 4878



SUB-SEA -662'



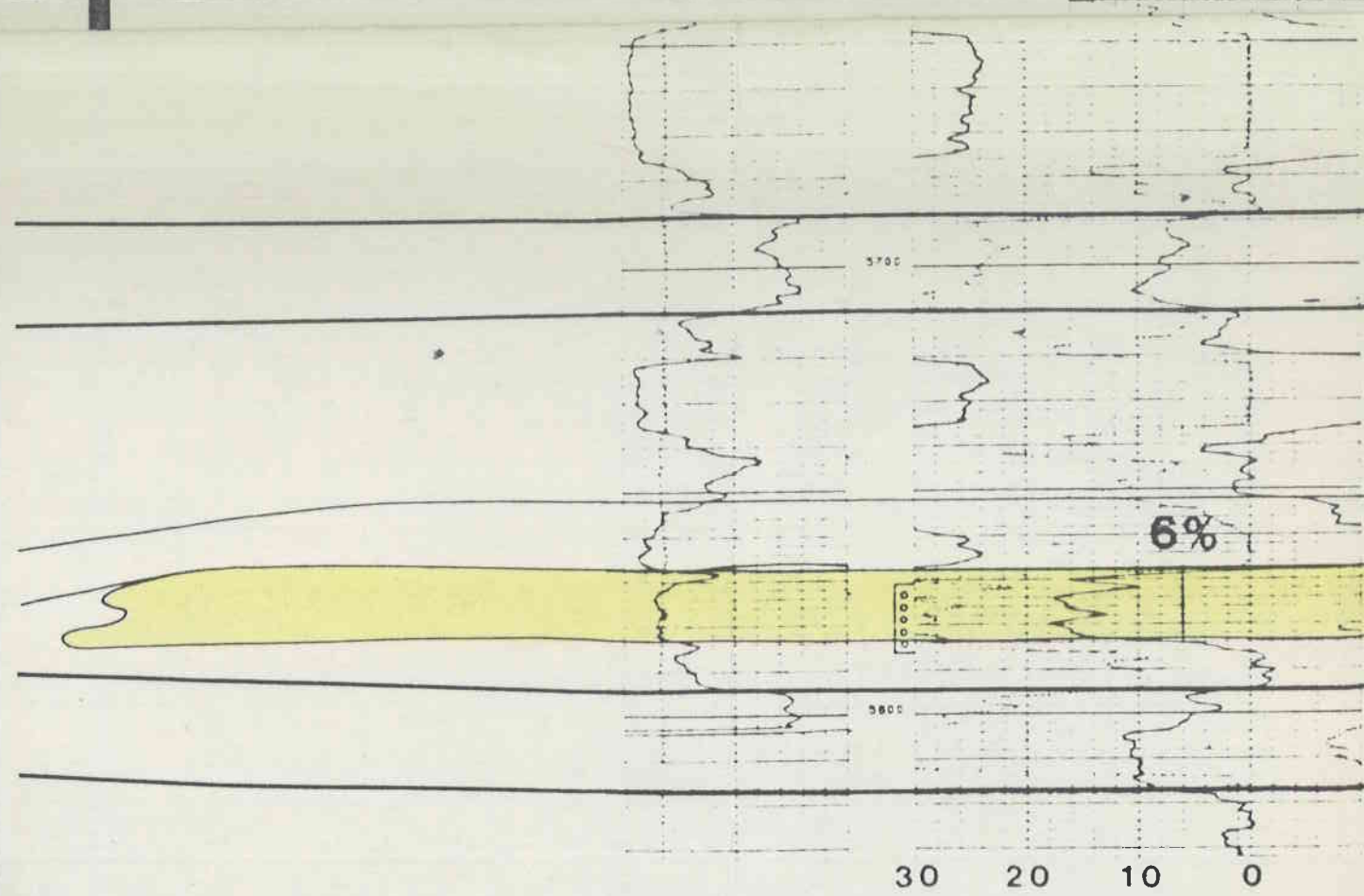
UPPER ISMAY

MIDDLE ANHYDRITE

A SHALE

LOWER ISMAY

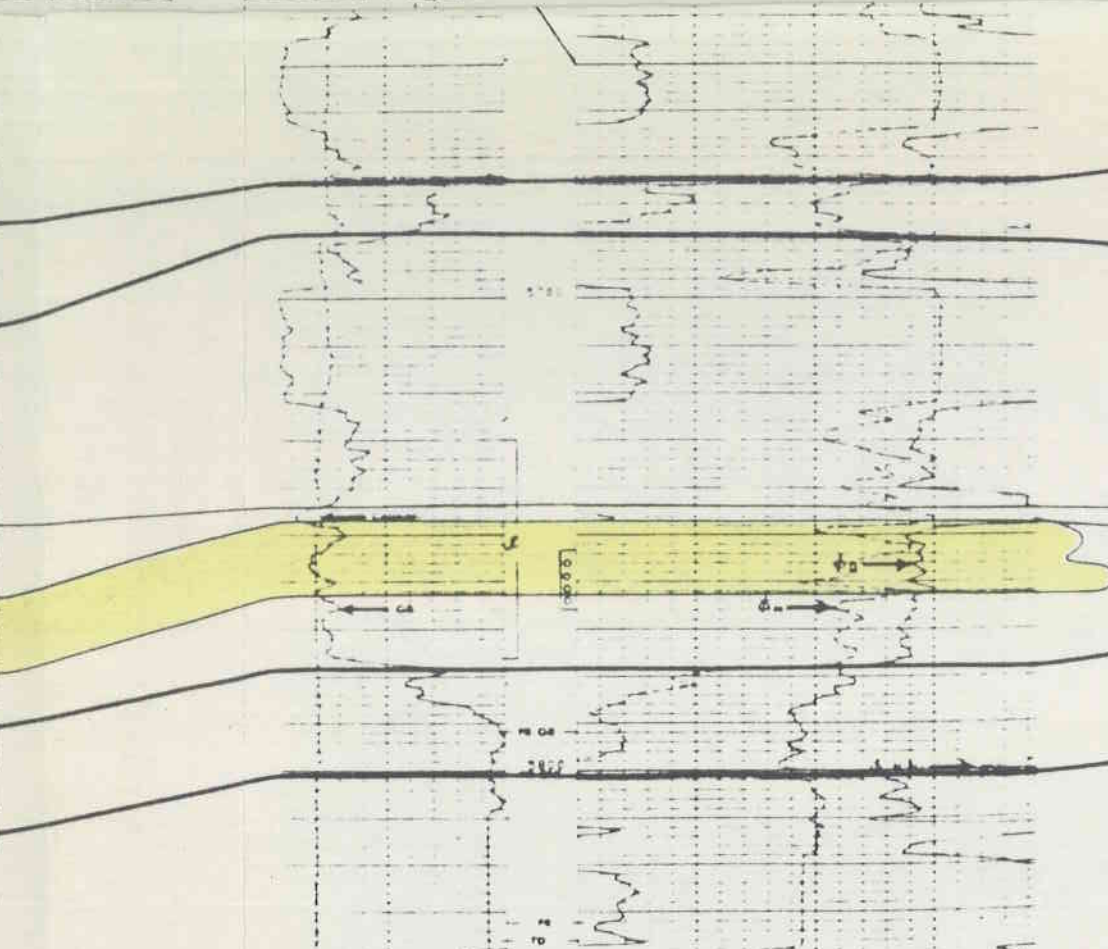
DATUM



TD 5827 12-84

PERF 5771-5784' DESERT CREEK
 PERF 5543-5596' (Gross) UPPER ISMAY
 DST 5514-5605'
 REC. 20 BBL OIL + 5 BBL O&GCM
 FP: 171-295: 255-543
 SIP: 1770 1779
 HP: 2631 2630

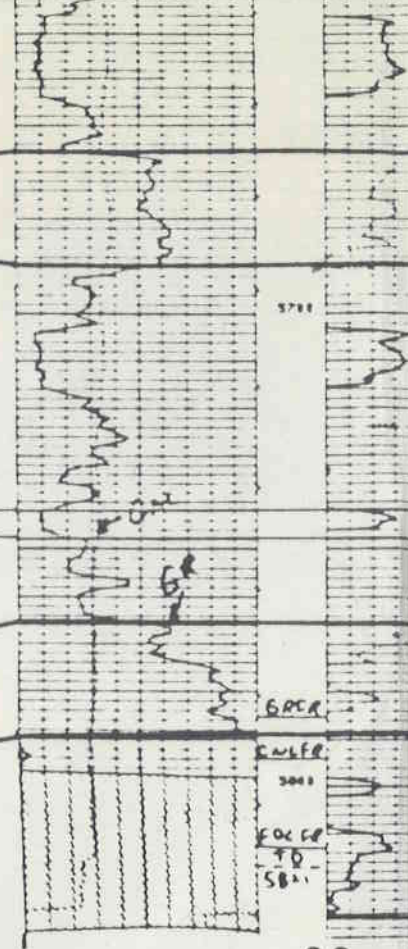
NO CORES



TD 5826 8-85

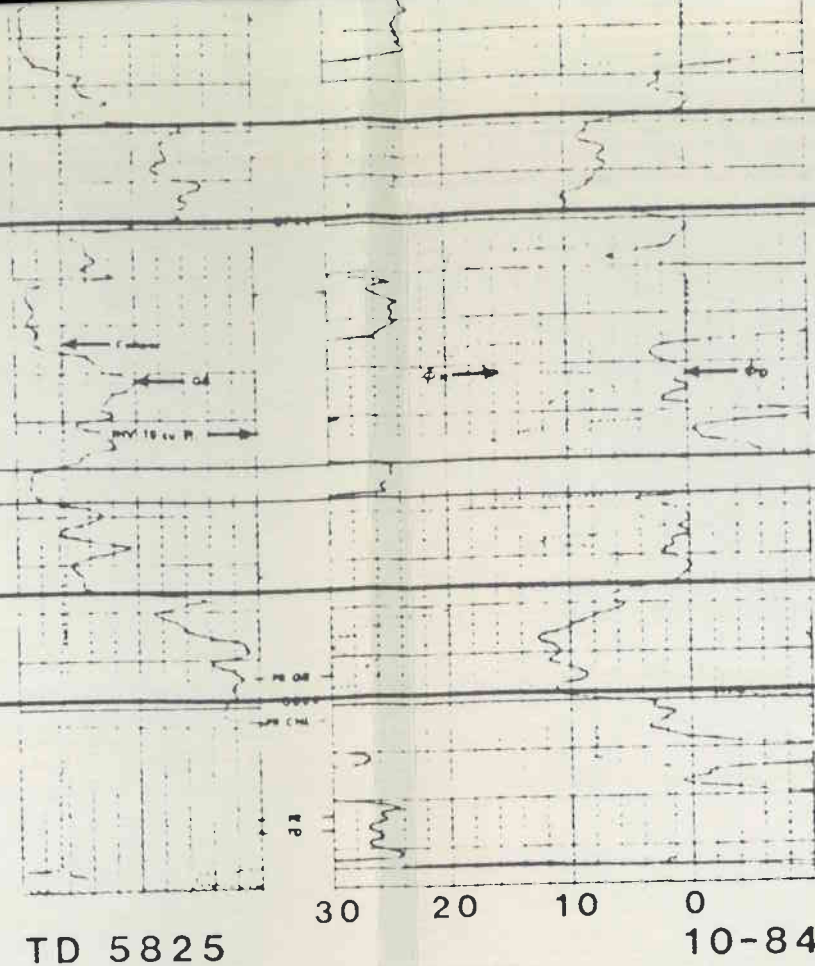
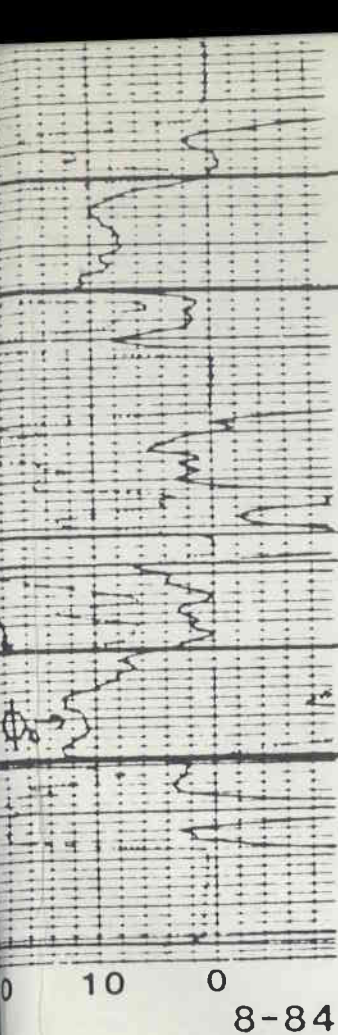
PERF 5753-5766' (GROSS)
 REC. SMALL AMT OIL ON PUMP
 PERF 5524-5597' (GROSS)
 DST 5486-5600'
 REC. 4 BBL O&GCM + 12 BBL HG&MCO
 FP: 307-347: 373-679
 SIP: 1589 1681
 HP: 2579 2539

CORE 5730-5775'



TD 5823

PERF 5519-5586' (GROSS)
 DST 5458-5574'
 REC. 3600' OIL
 FP: 320-665
 SIP: 1800
 HP: 3181
 CORE 5514-5573'
 8' SUC DOLO W
 LS W/ANY INC
 SOME ANY INC
 POROSITY. FOS



GOTHIC SHALE

DESERT CREEK

LWR DESERT CREEK

CHIMNEY ROCK SHALE

AKAH

SALT

TD 5825

30 20 10 0
10-84

CORE 5540-5599

REC. 46' ANHYDRITE, MASSIVE WITH
MINOR INTERBEDDED ANHY-DOL WITH
FEW LS INCL TR STRN DEAD OIL, NFOC

REC. 9' DOL LTBRN CRP-VFXL
W/RTHY ANHY XL. SOME DOL-LS
LTBRN CRP-VFXL, FAIR FLOR, F TO P
CUT TR STN VP PP VUG & INTERBED.
XL POR

200 M
18-1457
800

NHY INC: 4' VFXL FOS
6' VFXL TO SUC DOLO.
42' LS, VFXL, PP, VGY

KIVA FIELD

San Juan Co., Utah

C.L. CRAWLEY

10-85

RECEIVED

AUG 22 1985

**DIVISION OF OIL
GAS & MINING**

IGT

MERIDIAN OIL INCORPORATED
NAVAJO FEDERAL #4-2
SEC. 4, T39S-R25E
SAN JUAN COUNTY, UTAH

INTERMOUNTAIN GEO-TECH, INC.
P. O. BOX 158
DELTA, CO 81416
(303) 874-7762

MERIDIAN OIL INCORPORATED
NAVAJO FEDERAL #4-2
SEC. 4, T39S-R25E
SAN JUAN COUNTY, UTAH

August 19, 1985

Meridian Oil Incorporated, Navajo Federal #4-2, Section 4, T39S-R25E started drilling on 7/24/85. The well was drilled with an 11" bit from 80' to 2999' where on 7/28/85 a tripout was made for "E" logs to be run before setting surface casing. The casing and cementing was completed on 7/29/85. IGT Logging Unit #1 was on location and rigged up on 7/29/85. Surface casing was drilled out and mud logging was begun on 7/30/85 at 8:30 A.M. with fresh water. Problems with the back up pump caused several delays while the main pump was being repaired from 7/29/85 to 8/2/85 when the main pump was put back on the system. A bit trip was made on 8/3/85 to 8/4/85 at 4838', several joints of washed out and cracked drill pipe were also replaced at that time. On 8/5/85 another bit trip was made at 5357'. Pipe was strapped and a -10 depth correction was made. Drilling continued to a depth of 5600' (SLM 5596') on 8/6/85 when circulating for DST #1 was begun. Drill Stem Test #1 was run on 8/7/85 with good results, 19.5 barrels of slightly mud cut oil was reversed out into a storage tank. Drilling was again resumed on 8/8/85 and continued to a depth of 5730' in the Desert Creek where Core #1 was cut on 8/9/85. Core #1 was cut from 5730' to 5775' with 43.1' of the 45' cut recovered. After evaluation of the core the decision was made to resume drilling. Total depth was reached on 8/10/85 at 1:45 A.M. Schlumberger began logging on 8/10/85 and logging was completed on 8/10/85. Logs were evaluated and the decision to set pipe was made. IGT's Logging Unit #1 was released on 8/11/85.

Dave Meade
Geologist - IGT

MERIDIAN OIL INCORPORATED
NAVAJO FEDERAL #4
SEC. 4, T39S-R25E
SAN JUAN COUNTY, UTAH

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8. GEOLOGIC SUMMARY & ZONES OF INTEREST	15-17

DRILLING CONTRACTOR: AZTEC RIG 184
FARMINGTON, NEW MEXICO

DRILLING FOREMAN: MR. JIM MADDEN

PUSHER: MR. JOE VALENCIA

GEO TECHNOLOGISTS: MR. DAVE MEADE - MR. TERRY DAOUST
MR. NICK LARKIN
INTERMOUNTAIN GEO-TECH, INC.
P. O. BOX 158
DELTA, CO 81416

DRILLING FLUID: MR. GRANT NEWTON - MR. BOB HOELSCHER
MR. JIM CRISWELL
MILCHEM
MOAB, UTAH

DRILL STEM TESTS: MR. DELL GUNN
HALLIBURTON
FARMINGTON, NEW MEXICO

CORING: MR. MARK PARTRIDGE
CHRISTENSEN
VERNAL, UTAH

WIRE LINE LOGS: MR. TOM WEAVER
SCHLUMBERGER
FARMINGTON, NEW MEXICO

MERIDIAN OIL INCORPORATED
 NAVAJO FEDERAL #4-2
 SEC. 4, T39S-R25E
 SAN JUAN COUNTY, UTAH

SUMMARY OF DAILY ACTIVITY

DATE	ACTIVITY	MIDNITE DEPTH	24 HOUR FOOTAGE
7/29/85	UNIT #1 ON LOCATION, RIGGED UP	2999'	--
7/30/85	DRLG OUT PLUG, DRLG, SHORT TRIP, REPACK SWIVEL DRLG	2999'	320'
7/31/85	DRLG, SURV, DRLG	3319'	526'
8/01/85	DRLG, REPAIR PUMP, SURV, DRLG, SURV, DRLG	3845'	408'
8/02/85	DRLG, PUMP REPAIR, DRLG, SURV, DRLG	4253'	416'
8/03/85	DRLG, SURV, DRLG, TRIP BIT #3	4679'	259'
8/04/85	BIT TRIP (CONT'D), DRLG, REPAIR ROTARY TABLE DRLG	4938'	252'
8/05/85	DRLG, TRIP BIT #4, DRLG	5190'	191'
8/06/85	DRLG, CIRC FOR DST #1, TOH DST #1	5381'	215'
8/07/85	DST #1, TIH	5596'	0
8/08/85	TIH (CONT'D), DRLG, TRIP FOR CORE #1	5596'	34'
8/09/85	CORING, TRIP OUT W/CORE #1, TIH, DRLG	5730'	83'
8/10/85	DRLG, T.D. RUNNING "E" LOGS	5813'	7'
8/11/85	RUNNING "E" LOGS, IGT UNIT #1 RELEASED	5820'	0

MERIDIAN OIL INCORPORATED
NAVAJO FEDERAL #4-2
SEC. 4, T39S-R25E
SAN JUAN COUNTY, UTAH

BIT RECORD

BIT	MAKE	SIZE	TYPE	DEPTH OUT	FOOTAGE USED	HOURS
1	HTC	11"	J-22	2999'	2904'	83½
2	HTC	7 7/8"	J-22-C	4938'	1939'	94½
3	STC	7 7/8"	F-3	5357'	419'	30¾
4	REED	7 7/8"	HP53A	5596'	239'	20
5	REED	RR #4	HP53A	5730'	134'	13¾
6	CHRIS	7 7/8"	C-20	5775'	45'	11¾
7	REED	RR #4	HP53A	5820'	45'	4½

MERIDIAN OIL INCORPORATED
NAVAJO FEDERAL #4-2
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SAN JUAN COUNTY, UTAH

DEVIATION SHEET FOR WELL. . . .

DEPTH	DEVIATION (DEV)
421'	$\frac{3}{4}^{\circ}$
909'	1 $^{\circ}$
1452'	1 $^{\circ}$
1660'	$1\frac{3}{4}^{\circ}$
1830'	2 $^{\circ}$
1980'	1 $^{\circ}$
2345'	$\frac{1}{2}^{\circ}$
2750'	$\frac{1}{4}^{\circ}$
2999'	$\frac{1}{2}^{\circ}$
3191'	$\frac{1}{4}^{\circ}$
3505'	$\frac{1}{2}^{\circ}$
3897'	$\frac{3}{4}^{\circ}$
4204'	$\frac{3}{4}^{\circ}$
4600'	$1\frac{1}{4}^{\circ}$
4717'	$\frac{3}{4}^{\circ}$
4875'	1 $^{\circ}$
5083'	$\frac{3}{4}^{\circ}$
5357'	$\frac{1}{2}^{\circ}$
5600'	$\frac{1}{2}^{\circ}$
5820'	$\frac{1}{2}^{\circ}$

(IGT)
DST & SHOW SHEET

SHOW # 1 FROM 5524 ' TO 5548 ' DATE 8/6/85

COMPANY MERIDIAN OIL INCORPORATED
WELL NAVAJO FEDERAL #4-2
FIELD KIVA

	BEFORE SHOW	DURING SHOW	AFTER SHOW
DRILLING RATE	6.5 min/ft	2½-2 min/ft	5.5 min/ft
TOTAL GAS UNITS	3-5 Units	2½ Units	10 Units
METHANE %	tr	2.0%	.12%
ETHANE %	--	.67%	.01%
PROPANE %	--	.46%	tr
BUTANE (ISO) %	--	.15%	--
BUTANE (NOR) %	--	.13%	--
PENTANE %			

SAMPLE LITHOLOGY LS GV-GYBRN RE CRP-MICXL GRAN IP BTHV IP FOS IP SL DOL IP ARG IP
SL ANHY FR-G INTXL PG VUG POR TR O STN

SAMPLE FLOR AND CUT F-G BRI YEL FLOR G STMG MLK CUT

DST # 1 FROM 5486 ' TO 5600 ' DATE 8/7/85

	MINUTES	TOP CHART	BOTTOM CHART
INITIAL HYDROSTATIC		2579	2626
INITIAL OPEN	30	307-347	214-334
INITIAL SHUT-IN	60	1589	1600
SECOND OPEN	120	373-679	348-708
SECOND SHUT-IN	180	1681	1706
FINAL HYDROSTATIC		2539	2599

1ST FLOW Open tool w/wk blo, 7oz in 10 min, 23oz in 20 min, 56oz in 30 min

2ND FLOW Open tool w/stg blo 1½ lb, GTS, 13 lb in 12 min, 40 min had 1/8" choke
with 44 lb, 11.5 mcfg 110 min had 53 lb

REMARKS Spr oil 4218 at 60F BHT^o 60F

DRILL PIPE RECOVERY Reversed out 16 bbls total fluid = 12 bbls gtm cut oil
4 bbls stg cut mud

SAMPLE CHAMBER RECOVERY 1600 cc oil w/1200 psi 2.6 cfg gor 214

DRILL PIPE- TOP- R/W= at ^oF, MIDDLE-R/W= at ^oF,

DRILL PIPE- BOTTOM-R/W= at ^oF, SAMPLE CHMBR- R/W= at ^oF,

PIT MUD-R/W= at ^oF

GEO-TECH Dave Meade

(IGT)
DST & SHOW SHEET

SHOW # 2 FROM 5556 ' TO 5588 ' DATE 8/6/85

COMPANY MERIDIAN OIL INCORPORATED
WELL NAVEJO FEDERAL #4-2
FIELD KIVA

	BEFORE SHOW	DURING SHOW	AFTER SHOW
DRILLING RATE	5½-6 min/ft	2 min/ft	5 min/ft
TOTAL GAS UNITS	10 Units	110 Units	20 Units
METHANE %	.12%	1.2%	.2%
ETHANE %	.01%	.4%	.07%
PROPANE %	tr	.3%	.05%
BUTANE (ISO) %	--	tr	tr
BUTANE (NOR) %	--	tr	tr
PENTANE %			

SAMPLE LITHOLOGY LS-WH, BF GYBRN LTGY CRP-MICXL FOS IP SLTY IP ARG IP SL
DOL IP CLN FRM-MHD F INTXL-TR VUG POR N-TR O STN
SAMPLE FLOR AND CUT F-G BRI YEL FLOR N-G STMG MLK CUT

DST # _____ FROM _____ ' TO _____ ' DATE _____
MINUTES TOP CHART BOTTOM CHART

INITIAL HYDROSTATIC
INITIAL OPEN
INITIAL SHUT-IN
SECOND OPEN
SECOND SHUT-IN
FINAL HYDROSTATIC
1ST FLOW
2ND FLOW
REMARKS BHT^o
DRILL PIPE RECOVERY
SAMPLE CHAMBER RECOVERY
DRILL PIPE- TOP- R/W= at ^oF, MIDDLE-R/W= at ^oF,
DRILL PIPE- BOTTOM-R/W= at ^oF, SAMPLE CHMBR.- R/W= at ^oF,
PIT MUD-R/W= at ^oF

GEO-TECH Dave Meade

MERIDIAN OIL INCORPORATED
NAVAJO FEDERAL #4-2
SEC. 4, T39S-R25E
SAN JUAN COUNTY, UTAH

LITHOLOGICAL DESCRIPTION

5400-5410 80% LS-WH, GY GYBRN CRP-MICXL GRAN IP FOS IP SLTY IP
RTHY IP TT CHK IP FRM-HD
20% SH-M-DKGY OCC BLK BLKY-SBPLTY RTHY SLTY MICA IP
CARB IP CALC SFT-FRM
TR SLTST GY GYBRN BRN SDY MICA PYR IP ARG CALC FRI-
FRM
TR CHT-CLR SMKY HD

5410-5420 70% LS-BF-TAN BRN WH-LTGY IP CRP-MICXL RTHY IP OCC
CHK SL SLTY IP CLN IP TT IP SL FOS SL ANHY IP
FRM-HD
30% SH-LT-MGY DKGY-BLK IP A/A BRIT IP
TR CHT A/A
TR SLTST A/A

5420-5430 50% LS A/A
50% SH A/A DOL IP
TR ANHY-WH SFT
TR SLTST A/A

5430-5440 70% SH-M-DKGY DKGYBRN SBPLTY-SBBLKY RTHY-SLTY MICA
CALC-CARB DOL IP FRM-BRIT
30% LS A/A

5440-5450 50% SH-DKGY A/A BRIT IP
40% LS-WH LTGY BF-TAN BRN IP CRP-MICXL GRAN IP RTHY
IP CHK IP SL DOL SL ANHY FOS-ALG SL SLTY CLN IP
FRM-MHD
10% SLTST-LTGYBRN BRN RTHY LMY ARG IP MICA FRI-FRM
TR ANHY-WH XL IP SFT-FRM

5450-5460 50% LS A/A
40% SH-DKGY-BLK A/A
10% SLTST A/A
TR ANHY

5460-5470 70% LS-GYBRN BRN MICXL GRAN IP RTHY SLTY IP ARG FOS
ALG ANHY IP FRM-MHD
10% ANHY-WH TRNSL XL IP SFT-FRM
10% SH-DKGY BLK A/A
10% SLTST A/A

5470-5480 60% LS A/A V RTHY SLTY ANHY DOL IP
20% SH A/A
10% ANHY A/A
10% SLTST A/A
TR DOL-DKBRN MICXL RTHY LMY SLTY MHD

MERIDIAN OIL INCORPORATED
NAVAJO FEDERAL #4-2
LITHOLOGICAL DESCRIPTION CONTINUED

5480-5490 70% LS A/A TR ANHY INCL
20% ANHY-WH TRNSL XL IP SFT-MFRM
10% SH A/A
TR DOL A/A
TR SLTST A/A

5490-5500 40% LS A/A
20% ANHY A/A
20% SH A/A
10% DOL-BF-TAN CRP-MICXL CLN ANHY INCL SL LMY OCC
RTHY TT IP FRM-MHD
10% SLTST-LTGYBRN BRN RTHY LMY ARG IP MICA FRI-FRM

5500-5510 60% LS-LTGY BF-TAN BRN IP CRP-MICXL GRAN IP RTHY IP V
FOS-ALG SL ANHY ARG-SLTY DOL IP FRM-MHD
20% ANHY A/A
10% SH-M-DKGY BLK SBPLTY-BLKY RTHY SL SLTY CALC CARB
SL DOL SFT-FRM BRIT
10% DOL A/A

5510-5520 50% LS A/A
20% SH A/A
10% ANHY-WH TRNSL XL IP SFT-MFRM
10% DOL-BF-TAN GYBRN MICXL RTHY IP ANHY IP LMY IP
FRM-MHD
10% SLTST-GYBRN BRN ARG RTHY CALC V SL CARB SL SDY MICA
IP FRI-FRM

5520-5530 50% LS-GY-GYBRN BF CRP-MICXL GRAN IP RTHY IP FOS IP
DOL IP ARG IP SL ANHY F INTXL-PP VUG POR FRM-MHD
TR O STN F BRI Y FLOR G STMG CUT
30% SH-M-DKGY BLK BLKY-SBPLTY RTHY-SLTY CARB IP
CALC SFT-BRIT
10% DOL A/A
10% ANHY A/A
TR SLTST

5530-5540 70% LS A/A G INTXL-PP VUG POR G BRI Y FLOR TR O STN G
STMG MLK CUT
10% SH A/A
10% DOL A/A
10% ANHY A/A

5540-5550 80% LS A/A G INTXL-VUG POR G BRI Y FLOR TR O STN
G STMG MLK CUT
20% SH A/A
TR DOL
TR ANHY
TR SLTST

MERIDIAN OIL INCORPORATED
 NAVAJO FEDERAL #4-2
LITHOLOGICAL DESCRIPTION CONTINUED

5550-5560 60% SH-M-DKGY-BLK BLKY-SBPLTY RTHY-SLTY CARB-CALC
 MICA IP SFT-BRIT
 40% LS A/A NO VIS POR NFCOS

5560-5570 90% LS-GY GYBRN BF CRP-MICXL GRAN IP RTHY IP FOS IP
 DOL IP ARG IP SL ANHY G INTXL-PP VUG POR FRM-HD
 G BRI Y FLOR RR-TR O STN F STMG MLK CUT
 10% SH A/A

5570-5580 90% LS-WH BF GYBRN LTGY CRP-MICXL FOS IP SLTY IP ARG
 IP SL DOL IP CLN TT F INTXL POR FRM-HD F Y FLOR
 RR-TR O STN F MLK CUT
 10% SH A/A

5580-5590 100% LS A/A F INTXL-TR VUG POR G BRI Y FLOR TR O STN F-G
 STMG MLK CUT
 TR DOL-BRN-GYBRN MICXL GRAN IP RTHY ARG LMY SL SLTY
 V SL FOS TR INTXL POR FRM-MHD TR BRI Y FLOR TR O
 STN TR-F CUT

5590-5600 60% SH-BLK BLKY-SBPLTY SOOTY SLTY CARB-CALC FRM-BRIT
 40% LS A/A TR Y FLOR NSOC
 TR DOL A/A

5600-5610 100% SH A/A

5610-5620 90% SH-DKGY BLK A/A RTHY IP
 10% LS-GYBRN WH CRP-MICXL FOS IP RTHY IP SL ARG IP DOL
 IP TT FRM-HD

5620-5630 50% SH-DKGY BLK BLKY-SBPLTY RTHY-SOOTY SLTY CARB IP
 CALC SFT-FRM-BRIT IP
 50% LS-GY GYBRN BRN BF CRP-MICXL GRAN IP RTHY IP FOS
 IP SL ARG SLTY IP TT FRM-HD

5630-5640 60% LS-LTGY GYBRN BF-TAN IP CRP-MICXL GRAN-VFXL RTHY
 SLTY OCC FOS-CRIN ANHY-SL DOL IP FRM-MHD
 30% SH A/A
 10% ANHY-WH TRNSL XL IP SFT-MFRM

5640-5650 70% LS A/A TT IP
 20% ANHY A/A
 10% SH A/A

5650-5660 50% LS A/A DOL IP
 20% ANHY A/A
 20% DOL-LTGY GYBRN BRN IP MIC-VFXL RTHY-SLTY IP LMY
 SL ARG SL FOS IP ANHY IP FRM-MHD
 10% SH A/A

MERIDIAN OIL INCORPORATED
 NAVAJO FEDERAL #4-2
LITHOLOGICAL DESCRIPTION CONTINUED

5660-5670 50% DOL-PRED BRN MIC-VFXL V RTHY ARG LMY SLTY IP SL
 FOS IP ANHY IP FRM-MHD-HD IP VR DULL Y FLOR R-N VIS
 INTXL POR VR BRN STN N VIS CUT
 30% LS A/A
 10% ANHY A/A
 10% SH A/A

5670-5680 70% SH-DKGY BLK SBPLTY-BLKY RTHY-SLTY IP CALC-CARB
 SOOTY DOL IP SFT-FRM-BRIT IP
 20% DOL A/A TT
 10% LS A/A
 TR ANHY

5680-5690 80% SH A/A
 10% SLTST-DKGY-BRN V RTHY-ARG CLAC-SL CARB IP SL DOL
 SL SDY FRI-MFRM
 10% LS A/A
 TR DOL
 TR ANHY

5690-5700 40% SH A/A
 40% LS-WH LTGY LTGYBRN MIC-CRPXL GRAN IP RTHY-SL SLTY
 IP ARG IP FOS IP TR INTXL POR FRM-HD NFCOS
 10% DOL-DKBRN BRN MIC-CRPXL RTHY LMY ANHY IP FOS IP
 TR-R INTXL POR FRM-MHD NFCOS
 10% ANHY-WH SFT

5700-5710 40% LS A/A
 20% ANHY-WH XL IP SFT-FRM IP
 20% DOL A/A
 20% SH A/A

5710-5720 50% LS A/A
 30% DOL A/A
 10% ANHY A/A
 10% SH A/A

5720-5730 40% LS A/A
 30% DOL-BRN CRP-MICXL FOS IP RTHY-SL SLTY SL ANHY LMY
 FRM-HD NFCOS
 20% SH-DKGY-BLK BLKY-SBPLTY RTHY-SLTY IP CALC-CARB IP
 SOOTY IP DOL IP SFT-FRM BRIT IP
 10% ANHY A/A

5730-5775 SEE CORE #1 DESCRIPTION

5775-5780 100% SH-BLK BLKY-PLTY RTHY-SLTY CALC-CARB SOOTY FRM

MERIDIAN OIL INCORPORATED
NAVAJO FEDERAL #4-2
LITHOLOGICAL DESCRIPTION CONTINUED

5780-5790 100% SH A/A

5790-5800 70% SH A/A
30% DOL-BRN MICXL-GRAN IP RTHY-SLTY LMY ARG FRM-MHD NFCOS

5800-5810 60% DOL A/A SL ANHY
40% SH-DKGY BLK BLKY-PLTY RTHY-SLTY CALC-CARB SOOTY FRM

5810-5820 50% DOL A/A
30% SH A/A
20% LS-GY CRP-MICXL OCC GRAN RTHY-SLTY FOS IP ARG IP
FRM-MHD

MERIDIAN OIL INCORPORATED
NAVAJO FEDERAL #4-2
SEC. 4, T39S-R25E
SAN JUAN COUNTY, UTAH

FORMATION TOPS

FORMATION	SAMPLE TOP	SUB-SEA	E LOG TOP	SUB-SEA
HERMOSA	4500'	+373	4470'	+403
UPPER ISMAY	5446'	-573	5459'	-586
HOVENWEEP SHALE	5596'	-723	5598'	-725
LOWER ISMAY	5618'	-745	5622'	-749
GOTHIC SHALE	5670'	-797	5674'	-801
DESERT CREEK	5692'	-819	5686'	-813
CHIMNEY ROCK SHALE	5773'	-900	5776'	-903
AKAH	5794'	921	5800'	-927

MERIDIAN OIL INCORPORATED
NAVAJO FEDERAL #4-2
SEC. 4, T39S-R25E
SAN JUAN COUNTY, UTAH

CORE DESCRIPTION

CORE #1 5730'-5775' CUT 45' RECOVERED 43'

5730-5731 SH-BLK SBPLTY-BLKY RTHY SLTY CALC-CARB DOL BRIT
5731-5732 SH-A/A V LMY
5732-5733 LS-LT-MGY MICXL-GRAN RTHY SLTY TR INTBD ANHY XLS
P INTXL Ø NFCOS MHD
5733-5734 LS-LTGY MICXL RTHY DOL ANHY XLS SL ARG SLTY NO VIS Ø
NFCOS MHD
5734-5735 LS-LTGY MICXL-VFXL RTHY SLTY DOL TR INTBD ANHY G INTXL Ø
NFCOS MHD-HD
5735-5736 DOL-GYBRN-MGY MICXL RTHY V LMY ARG SL SLTY F INTXL Ø
NFCOS HD
5736-5757 ANHY-LTGY-CLR WH CRPXL DNS W/LS & SH PTGS
5737-5738 SH-DKGY-BLK PLTY LMY-DOL CARB W/LRG ANHY NOD RTHY SLTY BRIT
5738-5739 ANHY & DOL-MGY MICXL RTHY ANHY ARG HD LMY
5739-5740 ANHY-WH-CLR TT DNS RTHY DOL PTGS
5740-5741 ANHY-A/A W/DOL INCL DNS HD
5741-5742 ANHY A/A
5742-5743 ANHY A/A
5743-5744 DOL-DKGY BRN MICXL RTHY SLTY SL LMY ARG STYL TR INTBD
ANHY XLS SL FOS NO VIS Ø NFCOS MHD-HD
5744-5745 LS-GYBRN MICXL SL GRAN RTHY SLTY SL DOL TR ANHY XLS ABNT
CRIN FOS NO VIS Ø NFCOS MHD-HD
5745-5746 LS A/A ABNT CRIN FOS TR INTXL Ø NFCOS STYL HD
5746-5747 LS A/A ABNT CRIN & BRAC FOS FEW ANHY NOD TR-F INTXL Ø
NFCOS MHD-HD
5747-5748 LS A/A V RTHY V FOS
5748-5749 DOL-LTBRN MICXL RTHY SLTY LMY ARG FOS-CRIN & BRAC TR
ANHY XLS & NOD RR PP VUGS TR INTXL Ø NFCOS MHD-HD
5749-5750 DOL-BRN MICXL RTHY SLTY SL ARG LMY TR ANHY XLS & NODS
CRIN & BRAC FOS RR PP VUG Ø F INTXL Ø NFCOS MHD-HD
5750-5751 DOL-BRN A/A ABNT ANHY INCL & XLS TR PP VUG Ø ANHY FLG
IN Ø F INTXL Ø NFCOS MHD-HD
5751-5752 DOL-LTBRN MICXL-CRPXL V LMY RTHY TR ANHY XLS & FRAC FLG
ARG CRIN & BRAC FOS RR PP VUG Ø TR INTXL Ø NFCOS MHD-HD

MERIDIAN OIL INCORPORATED

CORE #1 DESCRIPTION CONTINUED

5752-5753 DOL-BRN A/A TR CRIN FOS RR ANHY XLS STYL VR PP VUG Ø
 PRED ANHY FL NFCOS MHD-HD

5753-5754 LS-LTGYBRN MICXL-CRPXL RTHY V DOL SL ARG SL SLTY ABNT
 CRIN FOS TR ANHY XLS V RR PP VUG Ø-ANHY FL TR INTXL Ø
 NFCOS MHD-HD

5754-5755 DOL-MGYBRN MICXL GRAN IP V RTHY ARG SLTY SL LMY ABNT
 CRIN FOS F INTXL Ø NFCOS MHD

5755-5756 SH-MGY PLTY-BLKY V DOL CALC CARB FOS-CRIN V RTHY SLTY BRIT

5756-5757 DOL-LTBRN CRPXL SL LMY SL RTHY BRAC & CRIN FOS TT ANHY HD

5757-5758 LS-BRN MICXL-CRPXL DOL SL RTHY ABNT CRIN & BRAC FOS TT
 TR ANHY XLS NO VIS Ø NFCOS HD

5758-5759 DOL-GYBRN MICXL GRAN RTHY SLTY ARG SL LMY TR ANHY XLS
 ABNT CRIN NO VIS Ø NFCOS

5759-5760 DOL-MGYBRN A/A ABNT CRIN NO VIS Ø HD NFCOS

5760-5761 DOL-MGY LMY A/A NO VIS Ø ABNT CRIN TT HD NFCOS

5761-5762 DOL-LTBRN CRPXL LMY TT ANHY FOS ABNT ANHY INCL NO VIS Ø
 NFCOS HD

5762-5763 LS-LTGYBRN MICXL RTHY ARG SL SLTY V FOS-BRAC & CRIN V DOL
 G INTXL Ø VR PP VUG Ø NFCOS HD

5763-5764 LS-LTGYBRN MICXL RTHY DOL SL ARG SL SLTY SL FOS V RR PP
 VUG Ø F INTXL O/ VR SP FLOR R STN SL MKY CUT HD

5764-5765 LS A/A N VIS Ø NFCOS

5765-5766 DOL-BRN MICXL RTHY LMY SL ARG V FOS-CRIN & BRAC TR ANHY
 XLS V RR VUG Ø TR-FXL Ø V FNT FLOR V RR STNG V SL MKY
 CUT HD

5766-5767 LS-LTGY MICXL GRAN IP RTHY V DOL SL ARG SL SLTY V FOS-
 BRAC & CRIN F INTXL Ø NFCOS MHD-HD

5767-5768 LS-LTBRN MICXL RTHY DOL SL ARG SL SLTY TR ANHY XLS & NODS
 V RR FLOR SL STN SL MKY CUT HD TR INTXL Ø ANHY FL

5768-5769 LS-LTBRN MICXL RTHY DOL ARG SL SLTY FOS TR INTBD ANHY XLS
 & NODS V RR PP VUG Ø TR INTXL Ø RR SP FLOR V FNT STN
 SL MKY CUT HD

5769-5770 LS-GYBRN MICXL RTHY DOL SL ARG SLTY SL FOS ANHY XLS V RR
 PP VUG Ø TR O STN TR-F INTXL Ø V RR FLOR SL MKY CUT HD

5770-5771 LS-LTGYBRN MICXL RTHY ARG SL DOL SL FOS TR ANHY XLS TR
 INTXL Ø V RR PP VUG Ø V FNT STN NFOC HD

5771-5772 LS-GYBRN MICXL RTHY DOL SL ARG SLTY SL FOS-CRIN & BRAC
 TR INTXL Ø NFCOS HD

MERIDIAN OIL INCORPORATED
CORE #1 DESCRIPTION CONTINUED

5772-5773 SH-DKGY PLTY-BLKY RTHY SLTY CALC-CARB DOL IP SOOTY FRM
5773-BTM SH-DKGY-BLK PLTY RTHY SLTY CALC-CARB MICA IP SL DOL
FRM-MHD

MERIDIAN OIL INCORPORATED
NAVAJO FEDERAL #4-2
SEC. 4, T39S-R25E
SAN JUAN COUNTY, UTAH

GEOLOGICAL SUMMARY
AND
FORMATION EVALUATION

Geological coverage of the Meridian (Milestone) Oil Incorporated, Navajo Federal #4-2 well began at 5400' in the Lower Hermosa (Honaker Trail) Formation. This well is located in Section 4, T39S-R25E.

UPPER ISMAY 5459 (-586) to 5598 (-725)

The Upper Ismay Formation of the Navajo Federal 34-2 well was a white to light gray occasionally buff to tan crypto to micro crystalline limestone in the upper part of the formation. This upper part of the Upper Ismay from 5459 to 5496 also contained some thin dark gray to black carbonaceous shales, several beds of dense anhydrite, a few light graybrown to brown earthy siltstones and brown, earthy slightly anhydritic dolomites.

From 5496 to 5523 the Upper Ismay was predominately gray to brown crypts to microcrystalline, occasionally granular, tight, anhydritic limestone with interbedded dense anhydrite, a few thin interbedded earthy brown anhydritic, tight, clean, crypto to micro crystalline dolomites and some thin earthy calcareous to carbonaceous slightly dolomitic shales.

The top of the Upper Ismay porosity was at 5523 (-650 subsea). The porosity was predominately a gray to buff cryptocrystalline to granular slightly argillaceous to occasionally earthy fossiliferous limestone. This limestone showed fair to good intercrystalline to pinpoint vugular porosity throughout. Throughout the porosity and in the occasional tight streaks within the porosity zone, there were a few earthy brown micro crystalline dolomites and black carbonaceous shale were encountered along with some tight limestones (only in the zones of no porosity). The tight zones were at 5548 to 5556 (-675 to -683) and also at 5578 to 5582 (-705 to -709).

The gas shows across the porosity zone (See Show Sheets #1 and #2) had a high reading of 215 Units on the hot wire and chromatograph readings of $C_1 = 2.0\%$, $C_2 = 0.6\%$, $C_3 = 0.46\%$, $IC_4 = 0.15\%$ and $NC_4 = 0.13\%$.

Drill Stem Test #1 was run from 5482 (-609) to 5596 (-723) flow pressures on the first and second flow periods were good with gas to surface 90 minutes into the test (See attached DST #1). No fluid came to surface during the test but upon reversing out 16 barrels of total fluid was calculated for recovery. (Note: Fluid recovery was calculated from pump strokes as to how many strokes to reach fluid and how many strokes to oil etc. Also the storage tank on location was strapped after the test and 19.5 barrels of fluid was calculated in the tank as compared to 12 barrels of fluid calculated from pump strokes). The overall porosity thickness was 74' and the total Ismay was 139'.

MERIDIAN OIL INCORPORATED
GEOLOGICAL SUMMARY CONTINUED

HOVENWEEP SHALE 5598' (-725) to 5622' (-749)

The Hovenweep Shale was a black, sooty, carbonaceous, very calcareous earthy suppropelic dolomite. This dolomite or shale was 24' thick and forms the source area for the porosity of the Upper Ismay.

LOWER ISMAY 5622' (-749) to 5674' (-801)

The Lower Ismay of the Navajo Federal #4-2 well was predominately a light gray, graybrown, buff to tan crypto, very finely crystalline earthy occasionally fossiliferous, tight, limestone becoming very anhydritic with thick anhydrite throughout the majority of the formation from 5644' to 5664'. The base of the Lower Ismay just above the Gothic Shale is a very earthy brown micro, very finely crystalline argillaceous, limy, slightly fossiliferous dolomite. This dolomite had a very rare visible fluorescence, rare to no visible intercrystalline porosity, very rare light brown stain with no visible cut. It is important to note that there were no significant increase in mud gas reading throughout the drilling of the Lower Ismay and no sample shows at all.

GOTHIC SHALE 5674' (-801) to 5686' (-813)

The Gothic Shale like the Hovenweep Shale is a very dark gray to black earthy slightly silty calcareous to carbonaceous sooty suppropelic dolomite but is commonly called a shale for convenience. The Gothic Shale is suppropelic dolomite in the Navajo #4-2 well, the Gothic in this well was substantially thinner. The thickness was 12' as compared to 23' in the 9-1 well and 20' in the 4-1 well.

DESERT CREEK 5686' (-813) to 5776' (-903)

In this Navajo Federal #4-2 well was a white, light gray, light graybrown crypto to micro crystalline slightly granular earthy fossiliferous silty to argillaceous limestone at the top becoming very dolomitic and anhydritic with some thin carbonaceous slides and a trace of earthy dolomite to a depth of 5698'. From 5698 to 5722 the upper part of the Desert Creek was predominately tight anhydritic limestone and dense thick anhydrite. The separation of the Upper and Lower Desert Creek 5722 to 5742 was a tight earthy dolomitic argillaceous limestone, thin carbonaceous shales and earthy slightly anhydritic dolomites. A 45' core (See attached sheet Core #1) was cut in the Lower Desert Creek starting at 5730 (-857) drill depth, 5738 (-8650 "E" log depth, in the transition zone described above. The top 13' of core was carbonaceous shale, tight anhydritic earthy limestone and earthy dolomite and dense anhydrite with dolomite, limestone and shale inclusions. Eighteen (18) feet into the core, where the major porosity or "Bug Zone" should have been was an earth brown, anhydritic, micro crystalline dolomite. This dolomite had very scattered rare pinpoint vugular to fair intercrystalline

MERIDIAN OIL INCORPORATED
GEOLOGICAL SUMMARY CONTINUED

porosity that was predominately anhydrite plugged. This zone was 4' thick and had no hydrocarbon odor and no visible oil stain on core. Two (2) other zones in the core, one 32' into the core and one 38' into the core, both 3' in total thickness showed a few scattered pinpoint vugs and had a very faint hydrocarbon odor and were slightly weeping oil. There was also a crusting of salt forming around these few scattered vugs. Nowhere in this 45' of core which ended in the top of the Chimney Rock Shale, although on 43' of the core was recovered, was no obvious evidence of any algal mound build up, just traces of possible remnants. After evaluation of the core the decision was made not to test the cored interval. The total thickness of the Desert Creek was 90'. The Lower Desert Creek made up 34' of the total thickness.

CHIMNEY ROCK SHALE 5776' (-903) to 5800' (-927)

The Chimney Rock Shale was a dark gray to black carbonaceous calcareous, sooty earthy shale or suppropelic dolomite. Like the Hovenweep and Gothic Shales or suppropelic dolomites, the Chimney Rock Shale is the source rock for production in the Lower Desert Creek porosity or "Bug Zone". The Chimney Rock also contained a earthy very argillaceous wiltstone and traces of anhydrite. The overall thickness of the Chimney Rock Shale was 24'.

AKAH 5800 (-927) to ?

The Navajo Federal #-2 well was T.D.'d in the Akah formation with only 26' of the total Akah formation drilled, so no total Akah thickness can be established. The Akah was a mixture of dark gray to black earthy silty carbonaceous shale, brown microcrystalline to granular limy dolomites and medium to dark gray crypto to microcrystalline earthy, silty, argillaceous, fossiliferous limestone. Neither the limestone nor the dolomite had any visible porosity nor fluorescence stain or cut, as both were very tight and occasionally slightly anhydritic, no production could be expected from the Akah in this area even though a small gas increase of 67 Units on the hotwire with chromatograph gases C₁ through C₃ detected at 5810' "E" log depth 5806' mudlog depth.

NOTE: All formation top and subsea depths are Schlumbergers' log depths unless designated otherwise.

IGT

MERIDIAN OIL INC.
NAVAJO FEDERAL #4-2
SEC. 4, T39S-R25E
SAN JUAN COUNTY, UTAH

IGT
INTERMOUNTAIN GEO-TECH, INC.
P. O. BOX 158
DELTA, CO 81416
303-874-7762

MERIDIAN OIL INC.
NAVAJO FEDERAL #4-2
SEC. 4, T39S-R25E
SAN JUAN COUNTY, UTAH

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3. DEVIATION SHEET	3
4. DST & SHOW SHEETS	4-5

(1) COPY FINAL MUD LOG (5"=100')
(1) COPY FINAL MUD LOG (2.5"=100')

DRILLING CONTRACTOR: AZTEC RIG 184
FARMINGTON, NEW MEXICO

DRILLING FOREMAN: MR. JIM MADDEN

PUSHER: MR. JOE VALENCIA

GEO TECHNOLOGISTS: MR. DAVE MEADE - MR. TERRY DAOUST
MR. NICK LARKIN
INTERMOUNTAIN GEO-TECH, INC.
P. O. BOX 158
DELTA, CO 81416

DRILLING FLUID: MR. GRANT NEWTON - MR. BOB HOELSCHER
MR. JIM CRISWELL
MILCHEM
MOAB, UTAH

DRILL STEM TESTS: MR. DELL GUNN
HALLIBURTON
FARMINGTON, NEW MEXICO

CORING: MR. MARK PARTRIDGE
CHRISTENSEN
VERNAL, UTAH

WIRE LINE LOGS: MR. TOM WEAVER
SCHLUMBERGER
FARMINGTON, NEW MEXICO

MERIDIAN OIL INC.
NAVAJO FEDERAL #4-2
SEC. 4, T39S-R25E
SAN JUAN COUNTY, UTAH

SUMMARY OF DAILY ACTIVITY

DATE	ACTIVITY	MIDNITE DEPTH	24 HOUR FOOTAGE
7/29/85	IGT UNIT #1 ON LOCATION, RIGGED UP	2999'	--
7/30/85	DRILLED OUT PLUG, DRLG, SHORT TRIP, REPACK SWIVEL, DRLG	2999'	320'
7/31/85	DRLG, SURV, DRLG	3319'	526'
8/01/85	DRLG, REPAIR PUMP, SURV, DRLG, SURV, DRLG	3845'	408'
8/02/85	DRLG, PUMP REPAIR, DRLG, SURV, DRLG	4253'	416'
8/03/85	DRLG, SURV, DRLG, TRIP BIT #3	4679'	259'
8/04/85	BIT TRIP CONT'D, DRLG, REPAIR ROTARY TABLE, DRLG	4938'	252'
8/05/85	DRLG, TRIP BIT #4, DRLG	5190'	191'
8/06/85	DRLG, CIRC FOR DST #1, TOH DST #1	5381'	215'
8/07/85	DST #1, TIH	5596'	0
8/08/85	TIH CONT'D, DRLG, TRIP FOR CORE #1	5596'	34'
8/09/85	CORING, TRIP OUT W/CORE #1, TIH, DRLG	5730'	83'
8/10/85	DRLG, T.D. RUNNING "E" LOGS	5813'	7'
8/11/85	RUNNING "E" LOGS, IGT UNIT #1 RELEASED	5820'	0

MERIDIAN OIL INC.
NAVAJO FEDERAL #4-2
SEC. 4, T39S-R25E
SAN JUAN COUNTY, UTAH

BIT RECORD

BIT	MAKE	SIZE	TYPE	DEPTH OUT	FOOTAGE USED	HOURS
1	HTC	11"	J-22	2999'	2904'	83¼
2	HTC	7 7/8"	J-22-C	4938'	1939'	94¼
3	STC	9 7/8"	F-3	5357'	419'	30¾
4	REED	7 7/8"	HP53A	5596'	239'	20
5	REED	RR #4	HP53A	5730'	134'	13¾
6	CHRIS	7 7/8"	C-20	5775'	45'	11¾
7	REED	RR #4	HP53A	5820'	45'	4¼

MERIDIAN OIL INC.
NAVAJO FEDERAL #4-2
SEC. 4, T39S-R25E
SAN JUAN COUNTY, UTAH

DEVIATION SHEET FOR WELL. . . .

DEPTH	DEVIATION (DEV)
421'	$\frac{3}{4}^{\circ}$
909'	1 $^{\circ}$
1452'	1 $^{\circ}$
1660'	$1\frac{3}{4}^{\circ}$
1830'	2 $^{\circ}$
1980'	1 $^{\circ}$
2345'	$\frac{1}{2}^{\circ}$
2750'	$\frac{1}{4}^{\circ}$
2999'	$\frac{1}{2}^{\circ}$
3191'	$\frac{1}{4}^{\circ}$
3505'	$\frac{1}{2}^{\circ}$
3897'	$\frac{3}{4}^{\circ}$
4204'	$\frac{3}{4}^{\circ}$
4600'	$1\frac{1}{4}^{\circ}$
4717'	$\frac{3}{4}^{\circ}$
4875'	1 $^{\circ}$
5083'	$\frac{3}{4}^{\circ}$
5357'	$\frac{1}{2}^{\circ}$
5600'	$\frac{1}{2}^{\circ}$
5820'	$\frac{1}{2}^{\circ}$

(IGT)
DST & SHOW SHEET

SHOW # 1 FROM 5524' TO 5548' DATE 8/6/85

COMPANY MERIDIAN OIL INC.
WELL NAVAJO FEDERAL #4-2
FIELD KIVA

	BEFORE SHOW	DURING SHOW	AFTER SHOW
DRILLING RATE	6.5 min/ft	2½-2 min/ft	5.5 min/ft
TOTAL GAS UNITS	3-5	215	10
METHANE %	tr	2.0%	.12%
ETHANE %	--	.67%	.01%
PROPANE %	--	.46%	tr
BUTANE (ISO) %	--	.15%	--
BUTANE (NOR) %	--	.13%	--
PENTANE %			

SAMPLE LITHOLOGY LS GY-GYBRN BF CRP-MICXL GRAN IP RTHY IP FOS IP SL DOL IP ARG
IP SL ANHY FR-G INTXL TO VUG POR TR O STN
SAMPLE FLOR AND CUT F-G BRI YEL FLOR G STMG MKY CUT

DST # 1 CORR 5484' TO 5596'
FROM 5486' TO 5600' DATE 8/7/85

	MINUTES	TOP CHART	BOTTOM CHART
INITIAL HYDROSTATIC		2579	2626
INITIAL OPEN	30	307-347	214-334
INITIAL SHUT-IN	60	1589	1600
SECOND OPEN	120	373-679	348-708
SECOND SHUT-IN	180	1681	1706
FINAL HYDROSTATIC		2539	2599

1ST FLOW Open w/weak blow, 7oz. in 10 Min., 23oz. in 20 Min., 56oz. in 30 Min.

2ND FLOW Open w/good blow, GTS, 13psi in 12 Min. 44psi w/11.5 mcf on 1/8" choke

REMARKS Spgr oil 42.8 @ 60°F good por-low perms on chart BHT 130°F

DRILL PIPE RECOVERY Reversed out: 16 bbls total fluid - 4 bbls o&g cut mud

SAMPLE CHAMBER RECOVERY 12 bbls highly g&m cut oil
1600 cc oil w/1200 psi 2.6 cfg gor 214

DRILL PIPE- TOP- R/W= at °F, MIDDLE- R/W= at °F,

DRILL PIPE- BOTTOM- R/W= at °F, SAMPLE CHMBR- R/W= at °F,

PIT MUD- R/W= at °F

GEO-TECH DAVE MEADE

(IGT)
DST & SHOW SHEET

SHOW # 2

FROM 5556 ' TO 5588 '

DATE 8/06/85

COMPANY MERIDIAN OIL INC
WELL Navajo Fed 4-2
FIELD Kiva

	BEFORE SHOW	DURING SHOW	AFTER SHOW
DRILLING RATE	5½-MIN./Ft.	2MIN./FT.	5MIN./Ft.
TOTAL GAS UNITS	10	110	20
METHANE %	.12%	1.2%	.2%
ETHANE %	.01%	.4%	.07%
PROPANE %	TR	3%	.05%
BUTANE (ISO) %		TR	TR
BUTANE (NOR) %		TR	TR
PENTANE %			

SAMPLE LITHOLOGY LS-WH, RE, GYBRN, LTGY, CRD-MICXL, FOS IP, SLTY IP, ARG IP

SL DOL IP, CLN FRM-MHD, F INTXL TR VUC POR, N TR O STN

SAMPLE FLOR AND CUT F-G BRI VEL FLOR, N-G STRMG MLK CUT

DST # _____ FROM _____ ' TO _____ ' DATE _____

MINUTES

TOP CHART

BOTTOM CHART

INITIAL HYDROSTATIC

INITIAL OPEN

INITIAL SHUT-IN

SECOND OPEN

SECOND SHUT-IN

FINAL HYDROSTATIC

1ST FLOW

2ND FLOW

REMARKS

BHT^o

DRILL PIPE RECOVERY

SAMPLE CHAMBER RECOVERY

DRILL PIPE- TOP- R/W= at ^oF,

MIDDLE-R/W= at ^oF,

DRILL PIPE- BOTTOM-R/W= at ^oF,

SAMPLE CHMER- R/W= at ^oF,

PIT MUD-R/W= at ^oF

GEO-TECH DAVE MEADE

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

U 52333

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo Federal

9. WELL NO.

4-2

10. FIELD AND POOL, OR WILDCAT

Kiva

11. SEC., T., R., M., OR BLK. AND

Sec. 04, T-39-S, R-25-E
SLB&M

12. COUNTY OR PARISH

San Juan

13. STATE

UT

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back a well in a reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR

Milestone Petroleum Company

3. ADDRESS OF OPERATOR

Post Office Box 4289, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)

At surface

300'S, 2225'E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

4864'GL

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

(Other) ☐

PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

ABANDON* ☐

CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐

FRACTURE TREATMENT ☐

SHOOTING OR ACIDIZING ☐

(Other) ☐

REPAIRING WELL ☐

ALTERING CASING ☐

ABANDONMENT* ☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

9-3-85

Swabbed well in. Now flow testing well to storage tanks for production test. Oil is being collected for future sales.

CONFIDENTIAL

18. I hereby certify that the foregoing is true and correct

SIGNED

Peggy L. Doak

TITLE

Drilling Clerk

DATE

9-4-85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT **TRIPPLICATE***
 (Other instructions on
 reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
 Use "APPLICATION FOR PERMIT—" for such proposals.)

<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; right: 0; transform: rotate(-15deg); font-weight: bold; font-size: 1.2em;">RECEIVED</div> <div style="position: absolute; bottom: 0; left: 0; transform: rotate(15deg); font-weight: bold; font-size: 1.2em;">SEP 09 1985</div> </div>		5. LEASE DESIGNATION AND SERIAL NO. U-52333
1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Milestone Petroleum		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR PO Box 4289, Farmington, NM 87499		8. FARM OR LEASE NAME Navajo Federal
4. LOCATION OF WELL (Report location clearly and in accordance with applicable requirements. See also space 17 below.) At surface 300'S, 2225'E		9. WELL NO. 4-2
14. PERMIT NO.		10. FIELD AND POOL, OR WILDCAT Kiva
15. ELEVATIONS (Show whether OF, AT, OR, etc.)		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 4, T-39-S, R-25-E SLB&M
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		12. COUNTY OR PARISH 13. STATE San Juan UT

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

It is requested that 100% of the information submitted on government reports be kept confidential until further notice from us.

18. I hereby certify that the foregoing is true and correct

SIGNED <u><i>Peggy Cook</i></u>	TITLE <u>Drilling Clerk</u>	DATE <u>9-5-85</u>
(This space for Federal or State office use)		
APPROVED BY _____	TITLE _____	DATE _____
CONDITIONS OF APPROVAL, IF ANY:		

RECEIVED

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
4241 State Office Building
Salt Lake City, UT 84114

SEP 09 1985

DIVISION OF OIL,
GAS & MINING*REPORT OF WATER ENCOUNTERED DURING DRILLING*Well Name & Number Navajo Federal #4-2Operator Milestone Petroleum Address PO Box 4289, Farmington, NM 87499Contractor Aztec Well Servicing Address PO Box "B", Aztec, NM 87410Location SW 1/4 SE 1/4 Sec. 4 T. 39S R. 25E County San JuanWater Sands

	<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
	<u>From</u>	<u>To</u>	<u>Flow Rate or Head</u>	<u>Fresh or Salty</u>
1.	3240	3250	10.4 gal/min.	salty
2.				
3.				
4.				
5.				

(Continue on reverse side if necessary)

<u>Formation Tops</u>	Entrada	630'	Hermosa	4507'
	Navajo	817'	Upper Ismay	5459'
	Chinle	1523'	Upper Desert Creek	5709'
	Cutler	2614'	Akah	5818'
<u>Remarks</u>				

NOTE: (a) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.

(b) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN THE STATE*
(Other instructions on re-
versal side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U 52333	
2. NAME OF OPERATOR Milestone Petroleum		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS OF OPERATOR P.O. Box 4289, Farmington, New Mexico 87499		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 300'S, 2225'E		8. FARM OR LEASE NAME Navajo Federal	
14. PERMIT NO.		9. WELL NO. 4-2	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4864' GL		10. FIELD AND POOL, OR WILDCAT Kiva	
		11. SEC., T., R., M., OR B.T.M. AND SURVEY OR AREA SLB & M Sec. 4, T39S, R25E	
		12. COUNTY OR PARISH San Juan	
		13. STATE Utah	

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) <input type="checkbox"/>	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. **DESCRIBE PROPOSED OR COMPLETED OPERATIONS** (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

See Attachment.

18. I hereby certify that the foregoing is true and correct

SIGNED Loren W. Fethergill TITLE Sr. Production Engineer

DATE September 18, 1985

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

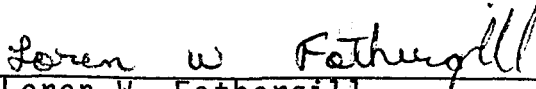
***See Instructions on Reverse Side**

Subject: Navajo Federal 4-2
Section 4, T-39-S, R-25-E
San Juan County, Utah

On September 4, 1985, an oil spill occurred on the Navajo Federal 4-1 tank battery location. The oil dump on the separator malfunctioned and the oil and water was dumped to the water tank. Approximately 100 barrels of water and oil each was spilled. The oil and water over flowed the tank and down a wash for one-half mile. The spill was discovered at 9:30 a.m. and the well was shut-in.

The spill was reported to Mr. Mike Wade at 1:00 p.m. on September 4, 1985. Work was begun that day to clean up the spill. The oil contaminated dirt was hauled from the wash to the reserve pit on the Navajo Federal 4-2. Margaret Powell gave archaeological clearance for the wash on September 5, 1985. Mr. Mike Wade supervised the clean up.

On Monday September 9, 1985, the wash was backfilled to the specifications on Mr. Mike Wade. The disturbed area adjacent to the wash and location will be ripped and sowed with seeds specified in the application to drill for the Navajo Federal 4-1. The reserve pit will be reclaimed as specified in the application to drill for the Navajo Federal 4-2.


Loren W. Fothergill
Production Engineer

LWF:te

MERIDIAN OIL

RECEIVED

OCT 18 1985

DIVISION OF OIL
GAS & MINING

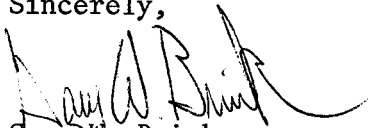
October 16, 1985

Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear Sirs:

It is requested that all information contained on attached forms
be held confidential.

Sincerely,



Gary W. Brink,
Project Drilling Engineer

GWB:djl
Enclosure

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

Meridian Oil Inc.

3. ADDRESS OF OPERATOR

PO Box 4289, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)

At surface

300'S, 2225'E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, CR, etc.)

4864' GL

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETION

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

8-11-85 Ran 142 jts. 5 1/2", 15.5#, K-55 8rd casing, 5811' set @ 5825'. Cemented with 710 sks. Class "B" 65/35 Poz with 6% gel (1150 cu.ft.) followed by 150 sks. Class "B" with 1% D-60 Flac (177 cu.ft.). Top of cement by T.S. 1500'.

8-22-85 Cleaned out to 5803'. Tested csg. to 4000 psi,ok. Perforated 5753-58', 5761-63', 5766' w/2 spf.

8-24-85 Acidized perforations with 13,000 gal.28% san-2 acid and 19,512 gal.40# gel. Flushed w/4000 gal.water.

8-25-85 Swabbing well. Recovering water.

8-28-85 Reacidized perforations with 20,000 gal.28% San-2acid, flushed with 1470 gal.water. Swab tested well.

8-30-85 Perforations non-productive.

8-31-85 Pulled pkr & tbq. Set 5 1/2" cmt. retainer @ 5701'. Tested ret. to 4000 psi,ok. Continued completion on Upper Ismay formation.

9-2-85 Perf'd 5524-36, 5539-43, 5546-51, 5557-5568, 5571-82, 5585-92, 5595-5597 w/2 SPF. Ran 2 7/8" tubing, set at 5322'. Baker Pkr. set at 5322'. Acidized with 5000 gal. 15% San-1 acid, 28,000 gal. 28% San-1 acid, 30,000 gals 40# gel, 2,770 gal. flush.

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE Drilling Clerk

DATE 10-15-85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

15

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐

2. NAME OF OPERATOR

3. ADDRESS OF OPERATOR

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface

At top prod. interval reported below

At total depth

5. LEASE DESIGNATION AND SERIAL NO.

U-52333

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo Federal

9. WELL NO.

4-2

10. FIELD AND POOL, OR WILDCAT

Kiva

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 4, T-39-S, R-25-E

SLB&M

12. COUNTY OR PARISH

San Juan

13. STATE

UT

15. DATE SPUDDED 7-24-85 16. DATE T.D. REACHED 8-11-85 17. DATE COMPL. (Ready to prod.) 9-6-85

18. ELEVATIONS (OF. RKB, RT, GR, ETC.)* 4864' GL 19. ELEV. CASINGHEAD 4864'

20. TOTAL DEPTH, MD & TVD 5825' 21. PLUG, BACK T.D., MD & TVD 5803'

22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY Rotary

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 5524 - 5597' (Upper Ismay)

25. WAS DIRECTIONAL SURVEY MADE

26. TYPE ELECTRIC AND OTHER LOGS RUN Dual-Lateralog; MSFL; Sonic; Comp. Neutron; Lithodensity; Dipmeter; Directional log; GR-CCL

27. WAS WELL CORED yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
14"	32.23#	92'	15"	24 sks.	
8 5/8"	32 & 24#	2999'	12 1/4"	1692 cu.ft.	
5 1/2"	15.5#	5825'	7 7/8"	1327 cu.ft.	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 7/8"	5322'	5322'

31. PERFORATION RECORD (Interval, size and number)

5524-36', 5539-43', 5546-51', 5557-5568', 5571'-82', 5585-92', 5595-5597' w/2 spf

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5524-5597'	5000 gal. 15% San-1 acid
	28,000 gal. 28% San-1 acid
	30,000 gals 40# gel
	2,770 gal. flush

33. PRODUCTION

DATE FIRST PRODUCTION 9-2-85 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) flowing WELL STATUS (Producing or shut-in) shut in

DATE OF TEST 9-6-85 HOURS TESTED 24 CHOKE SIZE 2" PROD'N. FOR TEST PERIOD OIL—BBL. 960.73 GAS—MCF. 1890 WATER—BBL. 39 GAS-OIL RATIO 1967

FLOW. TUBING PRESS. 300 CASING PRESSURE 0 CALCULATED 24-HOUR RATE OIL—BBL. 960.73 GAS—MCF. 1890 WATER—BBL. 39 OIL GRAVITY-API (CORR.) 41.1

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) vented, to be sold TEST WITNESSED BY L.W. Fothergill

35. LIST OF ATTACHMENTS temp. survey

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [Signature] TITLE Drilling Clerk DATE 10-15-85

*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, flowing and shut-in pressures, and recoveries):

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Morrison	Surface	630	Interbed grn brn and red waxy sh & fn to cr grn sd.	to Morrison	Surface	
Entrada	630	817	Orange, fn gr cl unconsolidated rd to sub-rd ss.	Entrada	630	
Navajo	817	1523	Wh to orange frn to cr grn ss, red organe soft wiltstone, red to brn soft silty sh.	Navajo	817	
Chinle	1523	2380	Rd to rd br sft sh w/occas. thn beds of brn & gry lst.	Chinle	1523	
Shinarump	2380	2620	Gry & purple med grn congl. ss inter w/soft brn & grn sh.	Shinarump	2380	
Cutler	2620	4507	Rd brn soft anhy. sh. Shale & sils-stone	Cutler	2620	
Hermosa	4507	5461	Wh gry & buff fn cryst hd ehirty ls.	Hermosa	4507	
Upper Ismay	5461	5685	White to gray, buff to brown, cryp to crystalline to granular, fossi-liferous dolomitic clean to orgilla-ceous, silty-earthly limestone with interbedded anhydrite and gray to brown, crypto crystalline to gran dolomite.	Upper Ismay	5461	
Upper Desert Creek	5685	5800	Lt to drk gry to brn cryptocrystalline to gran, earthy, silty dolomites w/ interbed anhyd and carb sh.	Upper Desert	5685	
Cored Desert Creek from	5730'	5772'.				
DST #1 - Tested 5486' to 5600'. ISIP 2579' psi. 1st flow 31 min. Recovered gas to surface @ 347 psi. No cushion. SI/60 min. Open tool 120 min. Recovered gas to surface @ 679' psi. SI/180 min. Final SIP/1681' psi. Reversed out 16 bbls. oil & gas cut mud Oil gravity 42.8 API.						

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT **TRIPPLICATE***
 (Other instructions on
 reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
 Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input checked="" type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER 2. NAME OF OPERATOR Meridian Oil, Incorporated 3. ADDRESS OF OPERATOR P.O. Box 4289, Farmington, New Mexico 87499-4289 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 300'S, 2225'E 14. PERMIT NO. 15. ELEVATIONS (Show whether OF, RT, GR, etc.) 4864' GL		5. LEASE DESIGNATION AND SERIAL NO. U 52333 6. IF INDIAN, ALLOTTEE OR TRIBE NAME 7. UNIT AGREEMENT NAME 8. FARM OR LEASE NAME Navajo Federal 9. WELL NO. 4-2 10. FIELD AND POOL, OR WILDCAT Kiva 11. SEC., T., R., M., OR B.L. AND SURVEY OR AREA SLB-M Sec. 4, T39S, R25E 12. COUNTY OR PARISH San Juan 13. STATE Utah
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RECEIVED

NOV 18 1985

**DIVISION OF OIL
 GAS & MINING**

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	(Other) <input type="checkbox"/>
(Other) Flare Permit <input checked="" type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Approval to flare the subject well for seven days is requested. The flare permit is required to run an interference test on the reservoir.

Federal approval of this action
 is required before commencing
 operations.

**ACCEPTED BY THE STATE
 OF UTAH DIVISION OF
 OIL, GAS, AND MINING**

DATE: 11/19/85
 BY: John R. Buge

18. I hereby certify that the foregoing is true and correct

SIGNED <u>Loren W. Fethergill</u>	TITLE <u>Production Engineer</u>	DATE <u>November 13, 1985</u>
-----------------------------------	----------------------------------	-------------------------------

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
 CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIP
(Other instructions re-
verse side)

Form approved.
Budget Bureau No. 1004-0155
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U 52333
2. NAME OF OPERATOR Meridian Oil Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR Post Office Box 4289, Farmington, NM 87499		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 300'S, 2225'E		8. FARM OR LEASE NAME Navajo Federal
14. PERMIT NO.		9. WELL NO. 4-2
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4864' GL		10. FIELD AND POOL, OR WILDCAT Kiva
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 04, T-39-S, R-25-E SLR&M
NOTICE OF INTENTION TO: TEST WATER SHUT-OFF <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> SHOOT OR ACIDIZE <input type="checkbox"/> REPAIR WELL <input type="checkbox"/> (Other) <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPLETE <input type="checkbox"/> ABANDON* <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/>		SUBSEQUENT REPORT OF: WATER SHUT-OFF <input type="checkbox"/> FRACTURE TREATMENT <input type="checkbox"/> SHOOTING OR ACIDIZING <input type="checkbox"/> (Other) <input type="checkbox"/> REPAIRING WELL <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> ABANDONMENT* <input type="checkbox"/>
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)		12. COUNTY OR PARISH San Juan
		13. STATE UT

This location has been cleaned up following drilling and completion operations. The location will be reseeded next summer.

18. I hereby certify that the foregoing is true and correct

SIGNED Gregory L. Darr TITLE Drilling Clerk 10420-85

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY: _____

*See Instructions on Reverse Side

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT TRIPLICATE
(Other instructions on
reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. <div style="text-align: center;">U 52333</div>
2. NAME OF OPERATOR <div style="text-align: center;">Meridian Oil Inc.</div>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR <div style="text-align: center;">P. O. Box 1855, Billings, MT 59103</div>		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) <div style="text-align: center;">At surface 300'S, 2225'E</div>		8. FARM OR LEASE NAME <div style="text-align: center;">Navajo Federal</div>
14. PERMIT NO.		9. WELL NO. <div style="text-align: center;">4-2</div>
15. ELEVATIONS (Show whether OP, RT, GR, etc.) <div style="text-align: center;">4864' GL</div>		10. FIELD AND POOL, OR WILDCAT <div style="text-align: center;">Kiva</div>
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA <div style="text-align: center;">SLB-M Sec. 4, T39S, R25E</div>
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*		12. COUNTY OR PARISH <div style="text-align: center;">San Juan</div>
18. STATE <div style="text-align: center;">Utah</div>		13. STATE <div style="text-align: center;">Utah</div>

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> SHOOT OR ACIDIZE <input type="checkbox"/> REPAIR WELL <input type="checkbox"/> (Other) <u>Convert to gas injection</u> <input checked="" type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPLETE <input type="checkbox"/> ABANDON* <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/>
---	---

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/> FRACTURE TREATMENT <input type="checkbox"/> SHOOTING OR ACIDIZING <input type="checkbox"/> (Other) <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> ABANDONMENT* <input type="checkbox"/>
--	--

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Approval to convert the subject well to a gas injection well is requested to allow production in the field, preserve reservoir pressure and eliminate the need to flare gas.

18. I hereby certify that the foregoing is true and correct

SIGNED

Lee R. Scherer

TITLE Regional Reservoir Engr.

DATE 12/11/85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING
ROOM 4241 STATE OFFICE BUILDING
SALT LAKE CITY, UTAH 84114
(801) 533-5771
(RULE I-5 & RULE I-4)

FORM NO. DOGM-UIC-1
(Revised 1983)


IN THE MATTER OF THE APPLICATION OF
Meridian Oil Inc.

CAUSE NO. _____

ADDRESS P. O. Box 1855
Billings, Montana ZIP 59103
INDIVIDUAL _____ PARTNERSHIP _____ CORPORATION X
FOR ADMINISTRATIVE APPROVAL TO DISPOSE OR
INJECT FLUID INTO THE Federal 4-2 WELL
SEC. 4 TWP. 39S RANGE 25E
San Juan COUNTY, UTAH

ENHANCED RECOVERY INJ. WELL	<input checked="" type="checkbox"/>
DISPOSAL WELL	<input type="checkbox"/>
LP GAS STORAGE	<input type="checkbox"/>
EXISTING WELL (RULE I-4)	<input type="checkbox"/>

Lease Name <u>Navajo Federal</u>	Well No. <u>4-2</u>	Field <u>Kiva</u>	County <u>San Juan</u>
Location of Enhanced Recovery Injection or Disposal Well <u>300'S 2225'E</u> Sec. <u>4</u> Twp. <u>39S</u> Rge. <u>25E</u>			
New Well To Be Drilled Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Old Well To Be Converted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Casing Test Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Date <u>8/22/85</u>	
Depth-Base Lowest Known Fresh Water Within 1/2 Mile <u>350'</u>	Does Injection Zone Contain Oil-Gas-Fresh Water Within 1/2 Mile YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		State What Oil/Gas
Location of Injection Source(s) <u>4-1 SESW Sec 4-T39S-R25E</u> <u>9-1 NWNE Sec 9-T39S-R25E</u>		Geologic Name(s) <u>U. Ismay/Desert Creek</u> and Depth of Source(s) <u>5543-96/5771-84'</u>	
Geologic Name of Injection Zone <u>U. Ismay</u>		Depth of Injection Interval <u>5523</u> to <u>5599'</u>	
a. Top of the Perforated Interval: <u>5524'</u>	b. Base of Fresh Water: <u>350'</u>	c. Intervening Thickness (a minus b) <u>5174'</u>	
Is the intervening thickness sufficient to show fresh water will be protected without additional data? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>			
Lithology of Intervening Zones <u>Limestone 5523-4380' / Intermittent Shale/Sand 4380-350</u>			
Injection Rates and Pressures Maximum <u>2000</u> MCFD <u>2500 (Surface)</u> PSI			
The Names and Addresses of Those to Whom Notice of Application Should be Sent. <u>*Bureau of Land Management Attn: Lynn Jackson</u> <u>Moab District Office/Branch of Fluid Minerals</u> <u>P. O. Box 970, 82 E. Dogwood</u> <u>Moab, Utah 84532</u>			


Lee R. Scherer, Regional Reservoir Engr, Meridian Oil Inc.
Name and Title of Representative of Company

*BLM only surface owner
Meridian only operator
within 1/2 mile of production

Date: 12-11, 19 85

INSTRUCTIONS

1. Attach qualitative and quantitative analysis of representative sample of water to be injected and a qualitative and quantitative analysis of the injection formation of water.
2. Attach plat showing subject well and all known oil and gas wells, abandoned, drilling and dry holes within one-half mile, together and with the name of the operator(s) and surface owner(s).
3. Attach Drillers Log (Form DOGM-UIC-2). (Appropriate Surety must be on file with Conservation Division or appropriate government agencies.)
4. Attach Electric or Radioactivity Log of Subject well (if released).
5. Attach schematic drawing of the well. (See Rule I-5(b)(3)).
6. If the application is for a NEW well the original and two (2) copies of the application and two (2) complete sets of attachments shall be mailed to the Division. For EXISTING well applications (Rule I-4) only ONE copy of the application and ONE complete set of attachments are required to be mailed to the Division.
7. The Division is required to send notice of application to the surface owner of the land within one-half mile of the injection well and to each operator of a producing leasehold within one-half mile of the injection well. List all required names and addresses in the appropriate space provided on the front of this form.
8. Notice that an application has been filed shall be published by the Division in a newspaper of general circulation in the county of publication before the application is approved. The notice shall include the name and address of applicant, location of proposed injection or disposal well, injection zone, injection pressure and volume. If no written objection is received within 15 days from date of publication the application may be approved administratively.
9. Form DOGM-UIC-3b must be filed by January 31st each year for all injection or disposal wells.
10. Approval of this application, if granted, is valid only as long as there is no substantial change in the operations set forth in the application. A substantial operation change requires the approval of a new application.
11. For enhanced recovery projects, information required by Rule I-4 which is common to more than one well, need be reported only once on the application.

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
Surface	14"	92'	24	Surface	-
Intermediate	8-5/8"	2999'	894	Surface	-
Production	5-1/2"	5825'	860	1500'	Temperature Survey
Tubing	2-7/8"	5322'	Name - Type - Depth of Tubing Packer Baker Mod R 5322'		
Total Depth 5825'	Geologic Name - Inj. Zone U. Ismay		Depth - Top of Inj. Interval 5523'		Depth - Base of Inj. Interval 5599'

PLEASE TYPE OR USE BLACK INK ONLY

(To be filed within 30 days after drilling is completed)

DEPARTMENT OF NATURAL RESOURCES AND ENERGY

API NO. 43-037-31161

640 Acres
N

DIVISION OF OIL, GAS, AND MINING

Room 4241 State Office Building

Salt Lake City, Utah 84114

COUNTY San Juan SEC. 4 TWP. 39S RGE. 25E

COMPANY OPERATING Meridian Oil Inc.

OFFICE ADDRESS P. O. Box 1855

TOWN Billings STATE MT ZIP 59103

FARM NAME Navajo Federal WELL NO. 4-2

DRILLING STARTED 7/24/85 DRILLING FINISHED 8/11/85

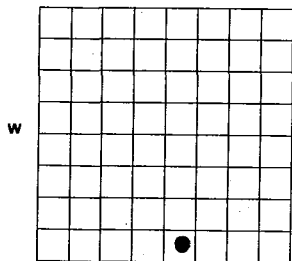
DATE OF FIRST PRODUCTION 9/2/85 COMPLETED 9/6/85

WELL LOCATED SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$

300 FT. FROM SL OF $\frac{1}{4}$ SEC. & 2225 FT. FROM EL OF $\frac{1}{4}$ SEC.

ELEVATION DERRICK FLOOR 4877 GROUND 4859

COUNTY
LEASE NO.



S
Locate Well Correctly
and Outline Lease

TYPE COMPLETION

Single Zone X

Multiple Zone

Comingled

LOCATION EXCEPTION

Approved 7/3/85

OIL OR GAS ZONES

Name	From	To	Name	From	To
<u>U. Ismay</u>	<u>5524</u>	<u>5597</u>			

CASING & CEMENT

Casing Set				Csg. Test	Cement		
Size	Wgt.	Grade	Feet	Psi	Sax	Fillup	Top
<u>14"</u>	<u>32.23</u>	<u>Line Pipe</u>	<u>92</u>	<u>-</u>	<u>24</u>	<u>24</u>	<u>Surface</u>
<u>8-5/8"</u>	<u>32/24</u>	<u>K-55</u>	<u>2999</u>	<u>-</u>	<u>894</u>	<u>894</u>	<u>Surface</u>
<u>5-1/2"</u>	<u>15.5</u>	<u>K-55</u>	<u>5825</u>	<u>4000</u>	<u>860</u>	<u>1160</u>	<u>1500'</u>

TOTAL DEPTH 5825'

PACKERS SET

DEPTH 5322'

NOTE: THIS FORM MUST ALSO BE ATTACHED WHEN FILING PLUGGING FORM DOGM-UIC-6

COMPLETION & TEST DATA BY PRODUCING FORMATION

FORMATION	1	2	3
U. Ismay			
SPACING & SPACING ORDER NO.	<u>40 Acres</u>		
	<u>Statewide</u>		
CLASSIFICATION (DISPOSAL WELL, ENHANCED RECOVERY, LP GAS STORAGE)	<u>Enhanced Recovery</u>		
PERFORATED	<u>5524-5536</u>		
	<u>5539-5543</u>		
	<u>5546-5551</u>		
INTERVALS	<u>5557-5568</u>		
	<u>5571-5582</u>		
	<u>5585-5592</u>		
	<u>5595-5597</u>		
ACIDIZED?	<u>5000 gal 15% San-1 acid</u>		
	<u>28000 gal 28% San-1 Acid</u>		
FRACTURE TREATED?	<u>30000 gal GEL</u>		

INITIAL TEST DATA

Date	<u>9/6/85</u>		
Oil, bbl./day	<u>960.73</u>		
Oil Gravity	<u>41.1</u>		
Gas, Cu. Ft./day	<u>1890</u> MCF	CF	CF
Gas-Oil Ratio Cu. Ft./Bbl.	<u>1967</u>		
Water-Bbl./day	<u>39</u>		
Pumping or Flowing	<u>Flowing</u>		
CHOKE SIZE	<u>2"</u>		
FLOW TUBING PRESSURE	<u>300</u>		

A record of the formations drilled through, and pertinent remarks are presented on the reverse.
(use reverse side)

Telephone 406/256-4126 Lee R. Scherer, Regional Reservoir Engr.
Meridian Oil Inc. Name and title of representative of company

Date: 12/11/85

MERIDIAN OIL

December 12, 1985

State of Utah
Division of Oil, Gas, and Mining
Room 4241 State Office Building
Salt Lake City, Utah 84114

Re: Gas Injection Proposal
Kiva Field
Navajo Federal 4-2
San Juan County, Utah

Gentlemen:

Enclosed are two complete copies of the Forms DOGM-UIC-1 and DOGM-UIC-2 with supporting geological and engineering data requesting administrative approval to inject gas into the referenced well as required under Section V Underground Injection Control of Recovery Operations and Class II Injection Wells.

The Kiva Field lies on 100% Federal acreage and Meridian is the only operator of production within 1/2 mile of the proposed injection well. The Bureau of Land Management in Moab, Utah has verbally concurred with Meridian's recommendation.

Meridian plans to place the Federal 4-1 and 9-1 wells on production and reinject all produced gas, less any lease usage, into the Federal 4-2 well. All production and injection will be measured and recorded as per BLM specifications. Injection rates are estimated to range from 1000 MCFD to 2000 MCFD at a maximum surface pressure of 2500 psi. Frac pressure is estimated to be in excess of 3600 psi. Meridian would like to begin reinjection by late January. By granting approval, the need to flare gas would be eliminated while maintaining reservoir pressure, thus optimizing total oil and gas production.

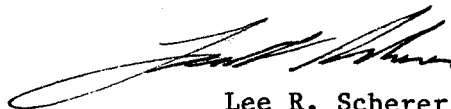
Sincerely,



Lee R. Scherer
Regional Reservoir Engineer

LRS/ch
Encl.
0969P

KIVA FIELD
GAS REINJECTION PROPOSAL
SAN JUAN COUNTY, UTAH

A handwritten signature in black ink, appearing to read 'Lee R. Scherer', is positioned above the printed name.

Lee R. Scherer
Regional Reservoir Engineer
Meridian Oil Inc.

December 11, 1985

DISCUSSION

GEOLOGY

Kiva Field is located in the Paradox Basin of southeastern Utah, approximately 30 miles north-northwest of the Four Corners Area formed by Colorado, Utah, New Mexico and Arizona. The new field in San Juan County, Utah, produces oil and associated gas from Middle Pennsylvania (Des Moinesian) age carbonate buildups in the Upper Ismay and Lower Desert Creek zones of the Paradox Formation. Regional dip in the area is to the southwest at 80 feet per mile.

Three producers have been drilled in the field, the Navajo Federal 9-1, 9-T39S-R25E, the Navajo Federal 4-1 and 4-2, 4-39S-R25E. The productive facies in the Upper Ismay is an algal wackestone limestone with some dolomitized zones. The net pay is 30 feet within a gross mound section of 60-80 feet. Production from the Lower Desert Creek is from 14 feet of dolomite in the Navajo Federal 4-1. The top of the Ismay porosity is structurally lowest at -672' subsea in the 4-1, with the 9-1 at -662' and the 4-2 structurally highest at a subsea depth of -650'.

The field is a stratigraphic trap formed by a lithology change from a limestone-dolomite reservoir facies to a thick offmound anhydrite as seen in the Navajo Federal 9-2.

(See Geologic Cross Section and Isopach map for reference.)

0885P
10-22-85



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

December 30, 1985

Mr. Patrick A. Crotty, Chief Ground Water Section
U.S. Environmental Protection Agency
Region VIII
One Denver Place - 999 18th Street Suite 1300
Denver, Colorado 80202-2413

Dear Mr. Crotty:

Re: Meridian Oil, Inc., Proposed Gas Reinjection Project and Class II Injection Well Application, Kiva Field, San Juan County, Utah

Enclosed for your review and consideration are copies of a gas reinjection project proposal and an application for approval of the Federal #4-2 well as a Class II injection well which were submitted by Meridian Oil, Inc. The proposed project and well are located in the recently discovered Kiva field, Township 39 South, Range 25 East, San Juan County. Meridian proposes to produce two oil wells, the #4-1 and #9-1, and reinject the produced associated gas, less any lease usage, into the Upper Ismay formation in the #4-2 well. This procedure will allow Meridian to obtain the necessary production history critical to reservoir performance evaluation while eliminating the need to flare and waste the associated gas produced with the oil.

The Division staff has reviewed the gas reinjection proposal information and the well application and has determined that such action would not affect or endanger any underground source of drinking water and would serve to realize the greatest ultimate recovery of oil and gas while conserving and preventing waste of the resources.

The Division anticipates the granting of an exception to Meridian to preclude the necessity of the hearing requirements of Rule 501(a), Requirements for Injection of Fluids into Reservoirs, Oil and Gas Conservation General Rules (effective December 2, 1985). Such an exception would be in accordance with Rule 201, Scope of Rules and Regulations, Oil and Gas Conservation General Rules, which allows for exception to the General Rules for good cause shown.

The Division requests that the Environmental Protection Agency also consider the granting of the exception in accordance with the conditions of Rule 201, thus allowing for the administrative

Page 2
Mr. Patrick Crotty
December 30, 1985


approval of this project. As previously stated, such action will allow Meridian to obtain additional necessary reservoir performance information for evaluation prior to continued field development and also provide sufficient information and data necessary for future modification or expansion of the project. Any such future modification or expansion would necessitate the filing of a petition and a hearing before the Board of Oil, Gas and Mining .

The application for the Class II injection well will be properly noticed and if no objection is received, the application will be considered for Division administrative approval.

The above described hearing exception and the granting of administrative approval of the project are appropriate actions affirmed by the Oil and Gas Conservation General Rules of the Board of Oil, Gas, and Mining. Although coordination policy has not been formulated between the Environmental Protection Agency and the Division of Oil, Gas and Mining regarding initiation of such action, the Division requests the EPA's concurrence in this first such matter.

Your early consideration and reply to this request would be appreciated. Please contact Mr. Gil Hunt of this office if further information or discussion is necessary.

Best regards,



Dianne R. Nielson
Director

GLH/jmc
Enclosure
cc: Meridian Oil
Robert Pruitt, Jr.



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

December 31, 1985

The San Juan Record
Legal Advertising
Box 879
Monticello, Utah 84535

Gentlemen:

RE: Notice of Hearing - CAUSE NO. UIC-073

Attached is a Notice of Hearing, before the Board of Oil, Gas and Mining, Department of Natural Resources, State of Utah.

It is requested that this notice be published ONCE ONLY, as soon as possible, but no later than the 8th day of January, 1986. In the event that said notice cannot be published by this date, please notify me immediately by calling 538-5340.

Upon completion of this request, please send proof of publication and statement of cost to the Division of Oil, Gas and Mining, 355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, Utah 84180.

Sincerely,

Marjorie L. Anderson
Administrative Assistant

Attachment
43570



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

December 31, 1985

Newspaper Agency Corporation
Legal Advertising
143 South Main - Mezzaine Floor
Salt Lake City, Utah 84110

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Sincerely,

Marjorie L. Anderson

Marjorie L. Anderson
Administrative Assistant

Attachments
43570

UIC-073

Publication was sent to the following:

The San Juan Record
Legal Advertising
Box 879
Monticello, Utah 84535

Newspaper Agency Corporation
Legal Advertizing
143 South Main - Mezzanine Floor
Salt Lake City, Utah 84110

Bureau of Land Management
Consolidated Financial Center
324 South State Street
Salt Lake City, Utah 84111-2303

U.S. Environmental Protection Agency
Suite 1300
Attn: Mike Strieby
999 18th Street
Denver Colorado 80202-2413

Meridian Oil Incorporated
PO Box 1855
Billings, Montana 59103

Bob Pruitt, Jr.
36 South State
Salt Lake City, Utah

AFFIDAVIT OF PUBLICATION

Public notice

BEFORE THE DIVISION OF
OIL, GAS AND MINING
DEPARTMENT OF
NATURAL RESOURCES
STATE OF UTAH

IN THE MATTER OF THE AP-
PLICATION OF MERIDIAN OIL
INCORPORATED FOR ADMINIS-
TRATIVE APPROVAL OF THE
NAVAJO FEDERAL #4-2 WELL,
LOCATED IN SECTION 4, TOWN-
SHIP 39 SOUTH, RANGE 25 EAST,
SAN JUAN COUNTY, UTAH, U.S.M.,
AS A CLASS II ENHANCED RE-
COVERY GAS INJECTION WELL

CAUSE NO. UIC-073

THE STATE OF UTAH TO ALL
INTERESTED PARTIES IN THE
ABOVE ENTITLED MATTER.

Notice is hereby given that Meridian
Oil Incorporated, P.O. Box 1855,
Billings, Montana 59103, has requested
administrative approval of the Navajo
Federal #4-2 well, located 300' FSL and
2225' FEL (SWSE) of Section 4, Town-
ship 39 South, Range 25 East, San Juan
County, Utah as a Class II enhanced
recovery gas injection well.

The proposed operating data for the
well is as follows:

Injection Interval: Upper Ismay
Formation 5,523' to 5,599'.

Maximum Estimated Surface Pres-
sure: 2500 psig.

Maximum Estimated Gas Injection
Rate: 2000 MMSCD

Approval of this application will be
granted unless objections are filed with
the Division of Oil, Gas and Mining
within fifteen days after publication of
this Notice. Objections, if any, should be
mailed to the Division of Oil, Gas and
Mining, Attention: UIC Program
Manager, 355 West North Temple, 3
Triad Center, Suite 350, Salt Lake City,
Utah 84180-1203.

DATED this 24th day of December,
1985.

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
MARJORIE L. ANDERSON
Administrative Assistant

Published in the San Juan Record
January 8, 1986.

I, Joyce Martin, being duly sworn,
depose and say that I am the publisher of the San
Juan Record, a weekly newspaper of general circulation
published at Monticello, Utah, every Wednesday; that
notice of application of Meridian Oil Incorporated,
Cause No. UIC-073

a copy of which is hereunto attached, was published in
the regular and entire issue of each number of said
newspaper for a period of 1 issues, the first
publication having been made on January 8, 1986.
and the last publication having been made on _____

Signature

Joyce A. Martin
Publisher

Subscribed and sworn to before me this 8th
day of January, A.D. 1986.

Ingred K Adams
Notary Public
Residing at Monticello, Utah

My commission expires December 2, 1987

AFFIDAVIT OF PUBLICATION

Public notice

BEFORE THE DIVISION OF
OIL, GAS AND MINING
DEPARTMENT OF
NATURAL RESOURCES
STATE OF UTAH

IN THE MATTER OF THE AP-
PLICATION OF MERIDIAN OIL
INCORPORATED FOR ADMINIS-
TRATIVE APPROVAL OF THE
NAVAJO FEDERAL #4-2 WELL,
LOCATED IN SECTION 4, TOWN-
SHIP 39 SOUTH, RANGE 25 EAST,
SAN JUAN COUNTY, UTAH, U.S.M.,
AS A CLASS II ENHANCED RE-
COVERY GAS INJECTION WELL.

CAUSE NO. UIC-073

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Manager, 355 West North Temple, 3
Triad Center, Suite 350, Salt Lake City,
Utah 84180-1203.

DATED this 24th day of December,
1985.

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
MARJORIE L. ANDERSON
Administrative Assistant

Published in the San Juan Record
January 8, 1986.

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notice of application of Meridian Oil Incorporated,
Cause No. UIC-073

a copy of which is hereunto attached, was published in
the regular and entire issue of each number of said
newspaper for a period of 1 issues, the first
publication having been made on January 8, 1986.
and the last publication having been made on _____

Signature

Joyce A. Martin
Publisher

Subscribed and sworn to before me this 8th
day of January, A.D. 1986.

Ingrid K. Adam
Notary Public

Residing at Monticello, Utah

My commission expires December 2, 1987

Affidavit of Publication

ADM-35

STATE OF UTAH,
County of Salt Lake

ss.

Cheryl Gierloff

BEFORE THE DIVISION OF
OIL, GAS AND MINING
DEPARTMENT OF
NATURAL RESOURCES
STATE OF UTAH
CAUSE NO. UIC-073

IN THE MATTER OF THE AP-
PLICATION OF MERIDIAN OIL
INCORPORATED, FOR AD-
MINISTRATIVE APPROVAL
OF THE NAVAJO FEDERAL
#4-2 WELL, LOCATED IN SEC-
TION 4, TOWNSHIP 39 SOUTH,
RANGE 25 EAST, SAN JUAN
COUNTY, UTAH, U.S.M., AS A
CLASS II ENHANCED RECOV-
ERY GAS INJECTION WELL.

THE STATE OF UTAH TO
ALL INTERESTED PARTIES IN
THE ABOVE ENTITLED MAT-
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tions are filed with the Division
of Oil, Gas and Mining within fif-
teen days after publication of
this Notice. Objections, if any,
should be mailed to the Division
of Oil, Gas and Mining, Atten-
tion: UIC Program Manager,
355 West North Temple, 3 Triad
Center, Suite 350, Salt Lake
City, Utah 84180-1203.

DATED this 24th day of De-
cember, 1985.

STATE OF UTAH
DIVISION OF OIL,
GAS AND MINING
MARJORIE L. ANDERSON
Administrative Assistant

Z-90

Being first duly sworn, deposes and says that he/she is
legal advertising clerk of **THE SALT LAKE TRIBUNE**,
a daily newspaper printed in the English language with
general circulation in Utah, and published in Salt Lake
City, Salt Lake County, in the State of Utah.

That the legal notice of which a copy is attached hereto

Cause No. UIC-073 - Application of Meridan

Oil Inc.

was published in said newspaper on

January 8, 1986

Cheryl Gierloff
Legal Advertising Clerk

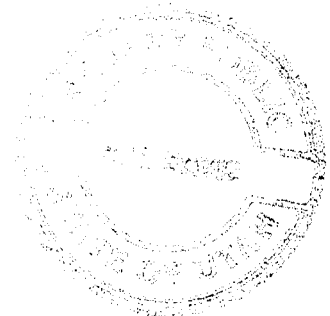
Subscribed and sworn to before me this 13th day of
January A.D. 1986.

B. J. Davis

Notary Public

My Commission Expires

March 1, 1988



Affidavit of Publication

ADM 35

STATE OF UTAH,
County of Salt Lake

ss.

BEFORE THE DIVISION OF
OIL, GAS AND MINING
DEPARTMENT OF
NATURAL RESOURCES
STATE OF UTAH
CAUSE NO. UIC-073

IN THE MATTER OF THE AP-
PLICATION OF MERIDIAN OIL
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DATED this 24th day of De-
cember, 1985.

STATE OF UTAH
DIVISION OF OIL,
GAS AND MINING
MARJORIE L. ANDERSON
Administrative Assistant

Z-90

Cheryl Gierloff

Being first duly sworn, deposes and says that he/she is
legal advertising clerk of THE SALT LAKE TRIBUNE,
a daily newspaper printed in the English language with
general circulation in Utah, and published in Salt Lake
City, Salt Lake County, in the State of Utah.

That the legal notice of which a copy is attached hereto

Cause No. UIC-073 - Application of Meridan

Oil, Inc.

was published in said newspaper on

January 8, 1986

Cheryl Gierloff
Legal Advertising Clerk

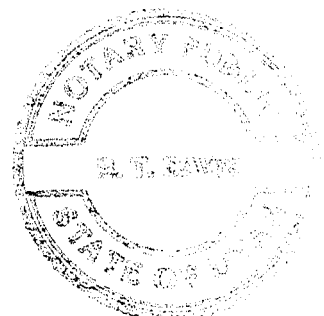
Subscribed and sworn to before me this 13th day of
January, A.D. 1986.

B. J. Davis

Notary Public

My Commission Expires

March 1, 1988



BEFORE THE DIVISION OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH

---00000---

IN THE MATTER OF THE APPLICATION : CAUSE NO. UIC-073
OF MERIDIAN OIL INCORPORATED, :
FOR ADMINISTRATIVE APPROVAL OF :
THE NAVAJO FEDERAL #4-2 WELL, :
LOCATED IN SECTION 4, TOWNSHIP 39 :
SOUTH, RANGE 25 EAST, SAN JUAN :
COUNTY, UTAH, U.S.M., AS A :
CLASS II ENHANCED RECOVERY GAS :
INJECTION WELL :

---00000---

THE STATE OF UTAH TO ALL INTERESTED PARTIES IN THE ABOVE ENTITLED
MATTER.

Notice is hereby given that Meridian Oil Incorporated, P.O. Box 1855, Billings, Montana 59103, has requested administrative approval of the Navajo Federal #4-2 well, located 300' FSL and 2225' FEL (SWSE) of Section 4, Township 39 South, Range 25 East, San Juan County, Utah as a Class II enhanced recovery gas injection well.


The proposed operating data for the well is as follows:

Injection Interval: Upper Ismay Formation 5,523' to 5,599'
Maximum Estimated Surface Pressure: 2500 psig
Maximum Estimated Gas Injection Rate: 2000 MMSCFD

Approval of this application will be granted unless objections are filed with the Division of Oil, Gas and Mining within fifteen days after publication of this Notice. Objections, if any, should be mailed to the Division of Oil, Gas and Mining, Attention: UIC Program Manager, 355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, Utah 84180-1203.

DATED this 24th day of December, 1985.

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING


MARJORIE L. ANDERSON

Administrative Assistant



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
ONE DENVER PLACE — 999 18TH STREET — SUITE 1300
DENVER, COLORADO 80202-2413

211C file
cc G. Hunt

FEB 13 1986

REF: 8WM-DW

RECEIVED
FEB 18 1986

DIVISION OF
OIL, GAS & MINING

Dianne R. Nielson, Director
Division of Oil, Gas, and Mining
3 Triad Center, Suite 350
355 West North Temple
Salt Lake City, Utah 84180-1203

Dear Dr. Nielson:

We have reviewed the proposed gas reinjection project for Meridan Oil. As discussed in a call from Mike Strieby to Ron Firth on January 23, 1986, we have no objection to the granting of the exception described in your letter of December 30th.

It is our understanding that any further expansion of injection activities in this field will be subject to a formal hearing before the Board.

Sincerely,

Patrick A. Crotty, Chief
Ground Water Section



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

February 26, 1986

Meridian Oil Inc.
P.O. Box 1855
Billings, Montana 59103

Gentlemen:

RE: Injection Well Approval - Cause No. UIC-073

Administrative approval is hereby granted to convert the following listed well to a Class II enhanced recovery gas injection well:

Navajo Federal #4-2
Section 4, Township 39 South, Range 25 East
San Juan County, Utah S.L.M.

This approval is conditional upon full compliance with the UIC rules and regulations adopted by the Board of Oil, Gas and Mining, and construction and operation of the well as outlined in the application submitted.

If you have any questions concerning this matter, please do not hesitate to call or write.

Best regards,

Dianne R. Nielson
Director

mfp
7627U



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

March 5, 1986

Mr. Lee Scherer, Regional Reservoir Engineer
Meridian Oil Inc.
P.O. Box 1855
Billings, Montana 59103

Dear Mr. Scherer:

RE: Gas Reinjection Project Proposal - Kiva Field, San Juan County

The gas reinjection proposal submitted by Meridian Oil on November 26, 1985, for gas reinjection operations in the Kiva field, San Juan County, has been reviewed by this Division. Although the Kiva field area on which the proposed reinjection operations will be conducted is entirely Federal acreage, approval in accordance with the Underground Injection Control Program of this Division is required.

Rule 501(a), Requirements for Injection of Fluids into Reservoirs, Oil and Gas Conservation General Rules, requires notice and hearing before the Board of Oil, Gas and Mining prior to initiation of such a reinjection project. The Division presented this proposed program to the Board in its monthly public Briefing Session. The Division recommended that the Board concur with an exception to Rule 501(a). Initial review of this proposal indicates that such action will not affect or endanger any underground source of drinking water and would serve to promote the greatest ultimate recovery of oil and gas and prevent waste. In addition, Meridian has categorized this as a pilot project which, if initiated, will provide sufficient production and reservoir data to allow for a final recommendation concerning gas sales and pressure maintenance.

An exception to the hearing requirements of Rule 501(a) and administrative approval for the Kiva gas reinjection project is hereby granted by the Division in accordance with Rule 201, Oil and Gas Conservation General Rules and with the concurrence of the Board. The United States Environmental Protection Agency has also reviewed the gas reinjection project proposal and has no objection to the granting of such an exception and approval by the Division. Any action beyond the presently proposed gas reinjection pilot project would require approval of the Board after appropriate noticing and hearing in accordance with the Board Procedural Rules.

Page 2
Meridian Oil Inc.
March 5, 1986

This administrative approval is granted subject to the following conditions:

- (1) Gas injection operations will be conducted utilizing only the Navajo Federal 4-2 well as outlined in the application submitted on December 11, 1985 and in accordance with the conditions of the administrative approval for the well.
- (2) As this is considered a pilot project, this administrative approval is valid for a six month period, beginning at the date of commencement of injection operations. Injecting operations must be commenced no later than September 5, 1986. At the conclusion of the six month period, Meridian will file a Petition with the Board of Oil, Gas and Mining for a hearing for the purpose of providing sufficient information and data for determining future actions and to obtain Board approval.
- (3) During the six month period, the Federal 4-1 and 9-1 wells shall be produced and operated in such a manner as necessary to develop and determine the necessary production history and reservoir characteristics information without causing damage to the reservoir and wells.

If you have any questions concerning this matter, please contact Gil Hunt, the UIC Program Manager, telephone (801) 538-5340.

Best Regards,



Dianne R. Nielson
Director

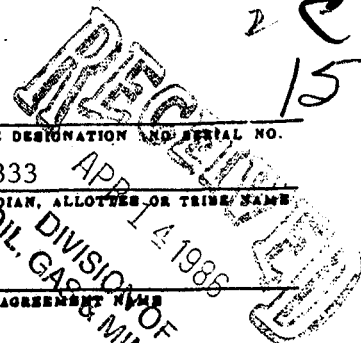
GLH/mfp

cc: Bureau of Land Management, Moab District
Robert G. Pruitt, Jr., Pruitt, Gushee & Fletcher
R.J. Firth, Division of Oil, Gas & Mining
U.S. Environmental Protection Agency

0156U-53,54

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT TRIPPLICATE
(Other instructions on reverse side)



SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> OPERATOR NAME CHANGE		5. LEASE DESIGNATION AND SERIAL NO. U-52333
2. NAME OF OPERATOR MERIDIAN OIL INC.		6. IF INDIAN, ALLOTTEE OR TRIBE/ NAME --
3. ADDRESS OF OPERATOR P. O. Box 1855, Billings, MT 59103		7. UNIT AGREEMENT NAME --
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 300'S, 2000'E		8. FARM OR LEASE NAME Navajo-Federal Navajo Fed
14. PERMIT NO.		9. WELL NO. See Below 4-2
15. ELEVATIONS (Show whether DP, RT, GR, etc.) 4864' GL		10. FIELD AND POOL, OR WILDCAT Kiva
		11. SEC., T., R., M., OR BLK. AND SURVEY, OR AREA Sec 4 T39S, R25E
		12. COUNTY OR PARISH San Juan
		13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) OPERATOR NAME CHANGE <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Operator Name change from Milestone Petroleum Inc. to Meridian Oil Inc.

WELL NUMBER	DESCRIPTION	API NUMBER
4-1	SESW Sec. 4-39S-25E	43-037-31112
4-2	SWSE Sec. 4-39S-25E	43-037-31161
4-3	NESW Sec. 4-39S-25E	43-037-31176
4-4	NWSW Sec. 4-39S-25E	43-037-31179
9-1	NWNE Sec. 9-39S-25E	43-037-31001
9-2	NENE Sec. 9-39S-25E	43-037-31059
10-1	SWNW Sec. 10-39S-25E	43-037-31073
30-1	NESW Sec. 30-38S-25E	43-037-31099
30-2	SENE Sec. 30-38S-25E	43-037-31100

18. I hereby certify that the foregoing is true and correct

SIGNED [Signature] TITLE Sr. Operations Technician DATE 4/9/86

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING
Room 4241 State Office Building
Salt Lake City, Utah 8414
(801) 533-5771

RECEIVED
APR 28 1986

DIVISION OF
OIL, GAS & MINING

RULE I-7 (d & e)

NOTICE OF (COMMENCEMENT) (TERMINATION) OF INJECTION
(Circle appropriate heading)

Check Appropriate Classification:

Date of Commencement / ~~Termination~~ 3-22-86

Disposal Well ☐

Enhanced Recovery Injection Well ☒

Enhanced Recovery Project ☐

Well Name 4-2 NAVAJO FEDERAL

Location: Section 4 Twp. 39S Rng. 25E, County San Juan

Order No. authorizing Injection UIC-073 Date 2-26-86

Zone into Which Fluid Injected U. Ismay/Desert Creek

If this is a Notice of Termination of injection, please indicate date well commenced injection.

If this is a Notice of Termination of injection, please indicate if well is to be plugged or returned to production; if returned to production, indicate producing interval

Operator Meridian Oil Inc.

Address P.O. Box 1855, Billings, Montana 59103-1855

Carolyn L. Shellenberg
Signature

April 23, 1986
Date

INSTRUCTION: If this is notification of an enhanced recovery project injection termination, it must be accompanied by an individual well status report for all project injection wells.

MERIDIAN OIL

BOARD
DR NIELSON
RJ Firth
MC Mounch
BW Roberts

September 10, 1986

RECEIVED
SEP 12 1986

DIVISION OF OIL, GAS & MINING

Ms. Dianne R. Nielson, Division Director
State of Utah
Natural Resources, Oil, Gas and Mining
355 W. North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

Re: Request for an Extension to the
Approval to Reinject Gas
Kiva Field, San Juan County, Utah

Dear Ms. Nielson:

The gas reinjection project for the subject field was approved by the State of Utah Administrative Board of Oil, Gas and Mining in a letter to Meridian Oil dated March 5, 1986. In that letter, one of the conditions for Administrative Board approval stated: "As this is considered a pilot project, this administrative approval is valid for a six-month period, beginning at the date of commencement of injection operations". Gas reinjection was initiated at the Kiva Field on March 22, 1986. The six-month administrative approval period terminates on September 22, 1986. Therefore, Meridian Oil requests the State of Utah Administrative Board of Oil, Gas and Mining extend the approval for gas reinjection in the Kiva Field.

Meridian Oil, while filing for the initial approval to reinject gas, identified the following items as reasons for initiating this project:

- 1) Allow sustained production in the field
- 2) Prevent the flaring or venting of produced gas
- 3) Conserve reservoir pressure through pressure maintenance
- 4) Provide needed reservoir data to evaluate the feasibility of supplemental recovery

The gas reinjection project provides a satisfactory operating procedure that allows production from the field, prevents waste of associated gas by reinjection, and provides needed reservoir data for supplemental recovery evaluation without jeopardizing the optimum ultimate recovery of oil and gas.

The progress to date on the supplemental recovery feasibility evaluation included the collection and preliminary analysis of the following data for use in the detailed reservoir modeling of the field:

- 1) Pressures - A series of pressure build-ups, 3-rate test, and interference tests were conducted to monitor the average reservoir pressure and determine the areal extent of the producing reservoir
- 2) Fluid Properties - PVT data was obtained from a bottom-hole fluid sample taken in the Navajo-Federal 4-2 well
- 3) Rock Properties - Relative permeability and capillary pressure curves were obtained from laboratory analysis of core samples of the upper Ismay Reservoir from the Navajo Federal 4-4 well
- 4) Reservoir Description - A series of geological maps were constructed incorporating data from individual wells and three dimensional seismic interpretation
- 5) Production History Data

A detailed reservoir model utilizing a three-phase, three-dimensional "black oil" simulator was used to match the historical performance of the reservoir and simulate several different scenarios for future development. The objectives of the simulation were to estimate the original oil-in-place and predict expected recoveries for continued primary depletion, the current gas reinjection project, and several waterflood scenarios. Preliminary results of the simulation are tabulated in the attachment. The results indicate the supplemental recovery in the Upper Ismay Reservoir of Kiva Field will yield significant additional reserves. A presentation providing additional detail on the work completed regarding supplemental recovery in the Kiva Field is planned for early October.

A tentative schedule of future work for the Kiva Field is as follows:

September, 1986	Complete ongoing field mechanical well work
October, 1986	Present preliminary supplemental recovery evaluation results to State and Federal organizations
	Complete a series of pressure tests to determine average reservoir pressure and areal extent of the reservoir to the north
November, 1986	Present all results to working interest partners
January, 1987	Unitization
February, 1987	Obtain State and Federal approval for full-scale supplemental recovery
March, 1987	Facilities construction for full scale supplemental recovery
May, 1987	Begin injection

The projected schedule for the Kiva Field development will require an additional 8 months of gas reinjection providing there are no delays to the project.

Therefore, Meridian Oil requests that the State of Utah Administrative Board of Oil, Gas and Mining extend the original approval for gas reinjection at the Kiva Field, subject to the same constraints as stated in the March 5, 1986 approval letter, for one year effective September 22, 1986. When the technical and economical feasibility of supplemental recovery has been completed and all working interest partners are in agreement on unit specifications, Meridian Oil will file a petition with the Administrative Board of Oil, Gas and Mining for a hearing for the purpose of approval for full scale supplemental recovery.

If there are any questions regarding this project, please give me a call at (406-256-4073).

Sincerely,

Daniel A. Sodersten

Daniel A. Sodersten
Petroleum Engineer

DAS/ch
Attach.

cc: J. B. Fraser
Lynn Jackson
Bureau of Land Management
Moab District

1569P

KIVA FIELD
SAN JUAN COUNTY, UTAH

SIMULATION RESULTS

SE Ismay Reservoir

Original Oil-in-Place = 2,770,000 STB

<u>Description</u>	<u>Total Oil Produced (STB)</u>	<u>% OOIP (%)</u>	<u>Project Ends</u>
Primary Depletion	563,400	20.3	2/91
Gas Reinjection	730,000	26.4	4/96
Waterflood - No Development Wells	985,600	35.6	9/94
Waterflood - 1 Development Well (Producer)	1,075,300	38.8	3/96
Waterflood - 2 Development Wells (1 producer, 1 injector)	1,319,500	47.6	5/96



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

September 30, 1986

Mr. Daniel A. Sodersten
Meridian Oil Inc.
175 North 27th St.
P.O. Box 1855
Billings, Montana 59103

Dear Mr. Sodersten:

RE: Extension of the Administrative Approval for the Kiva Field
Reinjection Project, San Juan County, Utah

Administrative approval for the Kiva field pilot reinjection project was granted by this Division on March 5, 1986, for a period of six months, beginning at the date of commencement of injection operations.

By letter dated September 10, 1986, Meridian requested a one year extension of the six month approval effective September 22, 1986. This requested extension will provide sufficient time to determine the technical and economic feasibility of supplemental recovery and to obtain agreement on unit specifications.

The requested extension is hereby granted subject to the conditions as stated in the March 5, 1986, approval letter subject to the following modifications:

- 1.) Condition (3) applies to all producing wells in the field.
- 2.) On or before 6 months from this date, Meridian will submit to the Division, a project progress update and detail of the technical work completed regarding supplemental recovery and progress toward unitization.

Page 2
October 1, 1986
Daniel A. Sodersten

If you have any questions concerning this matter, please contact
Gil Hunt at this office.

Best regards,

A handwritten signature in cursive script that reads "Dianne R. Nielson".

Dianne R. Nielson
Director

GLH/mfp
cc: EPA
Gil Hunt, UIC Manager
R.J. Firth, Associate Director, Oil and Gas
0134U-4

MERIDIAN OIL

October 30, 1989

RECEIVED
NOV 01 1989

DIVISION OF
OIL, GAS & MINING

State of Utah
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

Gentlemen:

Enclosed are the Monthly Oil and Gas Production Reports for Meridian Oil Inc. and Southland Royalty Company for the month of September, 1989. Please note that these reports will be submitted from our Fort Worth Office starting with the September report. Please change the mailing address and send the forms to the attention of Beverly Hearne in Fort Worth. Also, please add the 4-2 Navajo Federal well (see page 2 of the report) to the form.

If you have any questions please contact either the undersigned or Beverly Hearne.

Yours truly,



Maralene Spawn
Production Services Supervisor

mfs
Enclosures
cc: Beverly Hearne

11-6-89 Left message
11-8-89 Maralene indicated the 4-2 has
been a POW since Feb. Will send
Sunday

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE
(Other instructions
verse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

15

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug wells in different reservoirs.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL ☒ GAS ☐ OTHER ☐
WELL WELL

2. NAME OF OPERATOR
Meridian Oil Inc.

3. ADDRESS OF OPERATOR
1601 Lewis Ave., Suite 208, Billings, MT 59102

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

SWSE (300' FSL, 2225' FEL)

14. PERMIT NO.
43-037-31101

15. ELEVATIONS (Show whether DF, RT, CR, etc.)
4864' GL

5. LEASE DESIGNATION AND SERIAL NO.

U-52333

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Kiva (83687U6890)

8. FARM OR LEASE NAME

Navajo Federal

9. WELL NO.

4-2

10. FIELD AND POOL, OR WILDCAT

Kiva

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 4, T39S, R25E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

PEEL OR ALTER CASING

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

FRACTURE TREAT*

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/>

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The subject well was converted back to a flowing oil producer from a gas injector 2/21/89.

Pumping unit was installed 7/32/89;

IPP 261 BOPD, 134 MCFD, 9 BWPD, 9-1/2" SPM, 144" stroke

UIC	
GLH	<input checked="" type="checkbox"/>
DJH	<input checked="" type="checkbox"/>
BGH	<input checked="" type="checkbox"/>
COMPUTER	<input checked="" type="checkbox"/>
MICROFILM	<input checked="" type="checkbox"/>
FILE	<input checked="" type="checkbox"/>

OIL AND GAS	
DRN	RJF
JRB	GLH <input checked="" type="checkbox"/>
DTS	SLS
2-TAS	
3 -	MICROFILM <input checked="" type="checkbox"/>
4 -	FILE

18. I hereby certify that the foregoing is true and correct

SIGNED W. J. Brown

TITLE Production Superintendent

DATE 11/13/89

(This space for Federal or State office use)

APPROVED BY _____

TITLE _____

DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-1135
Expires September 30, 1990

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other

2. Name of Operator
Meridian Oil Inc.

3. Address and Telephone No.
Cortez, CO. 1/303/565-8644

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Navajo Federal 4-2
SW of SE Sect 4 T39S R25E

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

83687-U6890

8. Well Name and No.

Navajo Federal 4-2

9. API Well No.

43-037-31161

10. Field and Pool, or Exploratory Area

Kiva Field

11. County or Parish, State

San Jaun

12. **CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION

- ☒ Notice of Intent
- ☐ Subsequent Report
- ☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
- ☐ Recompletion
- ☐ Plugging Back
- ☐ Casing Repair
- ☐ Altering Casing
- ☐ Other

- ☐ Change of Plans
- ☐ New Construction
- ☐ Non-Routine Fracturing
- ☐ Water Shut-Off
- ☐ Conversion to Injection

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Meridian Oil proposes to construct a biological treatment pad for the treatment of crude oil production waste. Refer to attached proposal and schematic.

Activity will commence by December 1, 1992.

For Additional information please contact Lee Fyock at 1/303/930-9264.

**Accepted by the State
of Utah Division of
Oil, Gas and Mining**

Date: 11-17-92

By: [Signature]

RECEIVED

NOV 09 1992

**DIVISION OF
OIL GAS & MINING**

14. I hereby certify that the foregoing is true and correct

Signed

[Signature]

Title

Environmental Specialist

Date

11/5/92

(This space for Federal or State office use)

Approved by

Federal Approval of this

Title

Date

Conditions of approval, if any: Action is Necessary

NAVAJO FEDERAL 4-2 and HAVASU FEDERAL 42-24
BIO-DEGRADATION FACILITIES

Meridian Oil Inc. proposes to construct two bio-degradation facilities (bio-pads) for the biological treatment of crude oil contaminated soil, tank bottoms and other approved exempt oil production wastes. One pad is proposed for the Navajo Federal 4-2 and one at the Havasu Federal 42-24.

Site Preparation

Both locations currently have sufficient room to construct a 100 ft. by 150 ft. pad with out requiring additional disturbance to the well site. Each bio-pad will be graded on the level. The pads will be completely surrounded by earthen berms to prevent the runoff of storm water; refer to Figures 1 and 2.

Treatment Procedures

The only materials accepted for bio-remediation will be oil production RCRA exempt wastes generated by the Meridian Oil Inc. Cortez Area operations. All material brought to the sites for treatment will be recorded in a log book. The information recorded will contain the date, location, and approximate quantity of the material being treated.

Acceptable waste materials will include:

- Crude oil contaminated soils
- Crude oil tank bottoms
- Crude oil pit bottoms
- Other crude oil exempt wastes as approved by the BLM

All waste material will be evenly spread over the surface of the pad in lifts not exceeding six inches. Nutrients (agricultural fertilizers) will be spread over the material at agricultural rates and disced into the material with normal farm type equipment. Fresh water may be utilized at the initial spreading of the material if determined necessary by the operator.

Should composting techniques be required for certain wastes the procedures will include the addition of bulking agents such as wood chips, straw and manure. If composting is necessary the material will be heaped rather than evenly spread thus preserving heat and moisture.

Treatment will be considered complete when the TPH is below 1% as determined by approved EPA analytical methods. No material will be removed from the location without BLM approval.

SCHEMATIC

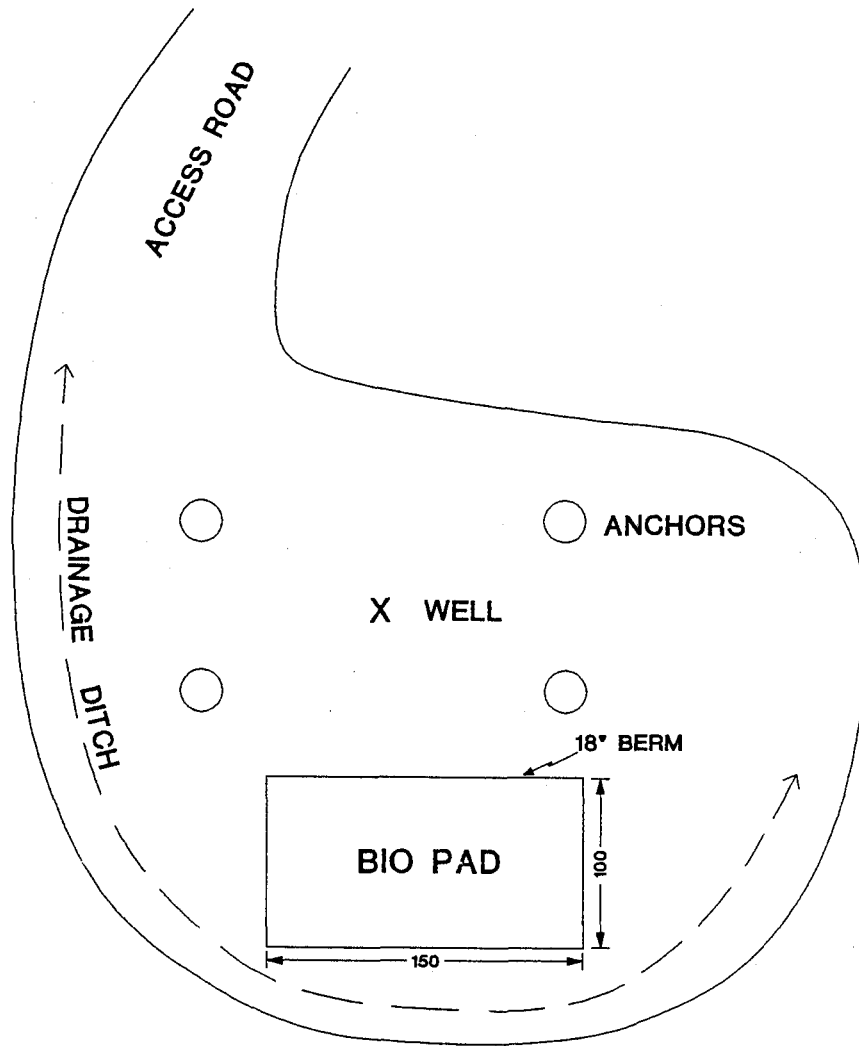


FIGURE 1. NAVAJO FEDERAL 4-2 WELL SITE AND PROPOSED BIO-PAD

Meridian Oil Inc. Navajo Federal 4-2 (Kiva Field)

Evaluation Ranking Criteria and Ranking Score
Utah Division of Oil, Gas and Mining

Site-Specific Factors	Ranking Score	Final Ranking Score
Distance to Groundwater (feet) >100 100 to 75 75 to 50 50 to 25 25 to 10 <10, or recharge area	0 4 8 12 16 20	0
Native Soil Type: Low permeability Mod. permeability High permeability	0 10 20	Bentonite at surface 0
Annual Precipitation (inches) <10 10 to 20 >20	0 5 10	0
Distance to Nearest Municipal Production Well (feet) >5280 1320 to 5280 500 to 1320 <500	0 8 10 15	0
Distance to Other Wells (feet) >1320 300 to 1320 <300	0 5 10	0
Distance to Surface Water (feet) >1000 300 to 1000 <300	0 2 5	0
Affected Populations <100 100 to 300 >3000	0 10 20	0
Presence of Nearby Utility Conduits Not Present Unknown Present	0 14 15	0
Final Score		0

OK Zock 11/17/92

STATE OF UTAH
DIVISION OF OIL, GAS AND MINES

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801

Page 1 of 2

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

MARALENE SPAWN
MERIDIAN OIL INC
PO BOX 3209
ENGLEWOOD CO 80155-3209

UTAH ACCOUNT NUMBER: N7230

REPORT PERIOD (MONTH/YEAR): 7 / 96

AMENDED REPORT ☐ (Highlight Changes)

Well Name			Producing Zone	Well Status	Days Oper	Production Volumes		
API Number	Entity	Location				OIL(BBL)	GAS(MCF)	WATER(BBL)
✓ INDIAN CREEK #1								
4301530082	02585	17S 06E 2	FRSD	✓		ML27626	E.mtn.Unit	
✓ INDIAN CREEK 10176-5								
4301530117	02585	17S 06E 10	FRSD	✓		U15203	E.mtn.Unit	
✓ INDIAN CREEK UNIT 021762-3								
4301530175	02585	17S 06E 2	FRSD	✓		U15204	E.mtn.Unit	
✓ 13-35 EMU HRE FEDERAL								
4301530230	02585	16S 06E 35	FRSD	✓		U56933	E.mtn.Unit	
✓ E MOUNTAIN UNIT 32-23								
4301530231	02585	16S 06E 23	FRSD	✓		U17024	E.mtn.Unit	
✓ HATCH POINT 27-1A								
4303730518	02815	27S 21E 27	CNCR	✓		U-20016	Hatch Point U / Exxon? Susp.?	
✓ T CANYON UNIT 33-18								
4301916203	09515	16S 25E 18	NWSE CDMTN	✓		U05059	(Non Committed Lease)	
✓ NAVAJO FEDERAL 9-1								
4303731001	09975	39S 25E 9	NWNE ISMY	✓		U52333	Kiva (Upper Mesa) Unit	
✓ NAVAJO FEDERAL 4-2								
4303731161	09975	39S 25E 4	SWSE ISMY	✓		U52333	Kiva (Upper Mesa) Unit	
✓ NAVAJO FEDERAL #4-4								
4303731179	09975	39S 25E 4	NWSE ISMY	✓		U52333	Kiva (Upper Mesa) Unit	
✓ 24-4 KIVA FEDERAL								
4303731745	09975	39S 25E 4	SESW ISMY	✓		USAU52333	Kiva (Upper Mesa) Unit	
✓ HAVASU-FEDERAL #22-19								
4303731278	10654	38S 24E 19	SESW ISMY	✓		U56186	Kechine Unit	
✓ HAVASU-FEDERAL #41-24								
4303731279	10654	38S 23E 24	NENE ISMY	✓		U20895	Kechine Unit	
TOTALS								

COMMENTS:

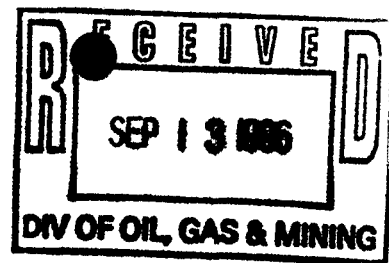
I hereby certify that this report is true and complete to the best of my knowledge.

Date: _____

Signature: _____

Telephone Number: _____

MERIDIAN OIL



September 10, 1996

State of Utah
Division of Oil, Gas and Mining
355 ~~1594~~ West North Temple
Salt Lake City, UT 84180

Re: Name Change from Meridian Oil Inc. to
Burlington Resources Oil & Gas Co.

Gentlemen:

Please be advised effective July 11, 1996 Meridian Oil Inc. changed their name and address to:

Burlington Resources Oil & Gas Co.
3300 North "A" St., Bldg. 6
Midland, TX 79710-1810

Please see the attached list of wells that Burlington Resources operates in the State of Utah. If you should have any questions, please contact me at (303) 930-9393 or after September 30th at (915) 688-6800.

Sincerely,

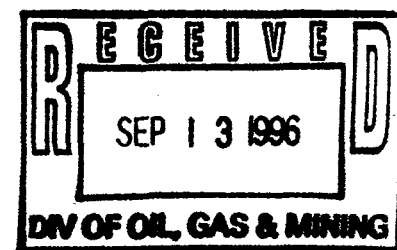
BURLINGTON RESOURCES OIL & GAS CO.

A handwritten signature in cursive script, appearing to read "Eileen Danni Dey".

Eileen Danni Dey
Senior Regulatory Compliance Representative

Enclosure

FIELD	WELL NAME	WELL NO	FORMATION/POOL	COUNTY	OCATIO	SEC	TWN	RGE	API NUMBER	FEDERAL LEASE NUMBER	STATE CONTROL NO.
BANNOCK	BANNOCK FEDERAL	21-33	ISMAY	SAN JUAN	NENW	33	038S	024E	43-037-3142500	UTU60786A	10923
CEDAR MOUNTAIN	EAST CANYON UNIT	33-18	CEDAR MOUNTAIN	GRAND	NWSE	18	016S	025E	43-019-1620300	UTU05059	9515
EAST MOUNTAIN	EAST MOUNTAIN FEDERAL	13-35	FERRON	EMERY	NWSW	35	016S	006E	43-015-3023000	57287U6920	10789
EAST MOUNTAIN	EAST MOUNTAIN FEDERAL	32-23	FERRON	EMERY	SWNE	23	016S	006E	43-015-3023100	57287U6920	11075
FERRON	INDIAN CREEK UNIT	1	FERRON	EMERY	SWNW	02	017S	006E	43-015-3008200	57287U6920	02585
FERRON	INDIAN CREEK UNIT	3	FERRON	EMERY	SWSW	02	017S	006E	43-015-3107500	57287U6920	02585
FERRON	INDIAN CREEK UNIT 10176	5	FERRON	EMERY	SENE	10	017S	006E	43-015-3011700	57287U6920	02585
FERRON	INDIAN CREEK UNIT 14176	2	FERRON	EMERY	SWNE	14	017S	006E	43-015-3009100	UTU15202	10907
KACHINA	ARABIAN FEDERAL (W/W)	2	ISMAY	SAN JUAN	NWSW	19	038S	024E	43-037-3128200	UTU56186	10654
KACHINA	ARABIAN FEDERAL	3	ISMAY	SAN JUAN	NESW	19	038S	024E	43-037-3128700	UTU56186	10654
KACHINA	HAVASU FEDERAL (W/W)	11-19	UPPER ISMAY	SAN JUAN	NWNW	19	038S	024E	43-037-3145800	UTU56186	10654
KACHINA	HAVASU FEDERAL	12-19	UPPER ISMAY	SAN JUAN	SWNW	19	038S	024E	43-037-3145700	UTU56186	10654
KACHINA	HAVASU FEDERAL	12-19A	ISMAY	SAN JUAN	SWNW	19	038S	024E	43-037-3145900	UTU56186	10654
KACHINA	HAVASU FEDERAL	22-19	UPPER ISMAY	SAN JUAN	SENE	19	038S	024E	43-037-3127800	UTU56186	10654
KACHINA	HAVASU FEDERAL	41-24	UPPER ISMAY	SAN JUAN	NENE	24	038S	023E	43-037-3127900	UTU20895	10654
KACHINA	HAVASU FEDERAL (W/W)	42-24	UPPER ISMAY	SAN JUAN	SENE	24	038S	023E	43-037-3129800	UTU20895	10654
KACHINA	WASH UNIT (W/W)	2	CUTLER	SAN JUAN	SESE	13	038S	023E	43-037-3132400	UTU20894	10654
KIVA (DESERT CREEK)	NAVAJO FEDERAL	41-5	DESERT CREEK	SAN JUAN	NENE	05	039S	025E	43-037-3142100	UTU57895	10810
KIVA (UPPER ISMAY)	KIVA FEDERAL	24-4	ISMAY	SAN JUAN	SESW	04	039S	025E	43-037-3174500	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL (W/W)	12-4	ISMAY	SAN JUAN	SWNW	04	039S	025E	43-037-3139500	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL (W/W)	14-4	ISMAY	SAN JUAN	SWSW	04	039S	025E	43-037-3132100	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL (W/W)	21-9	ISMAY	SAN JUAN	NENW	09	039S	025E	43-037-3126700	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL (W/W)	23-4	UPPER ISMAY	SAN JUAN	NESW	04	039S	025E	43-037-3125900	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL	4-2	ISMAY	SAN JUAN	SWSE	04	039S	025E	43-037-3116100	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL	4-4	ISMAY	SAN JUAN	NWSW	04	039S	025E	43-037-3117900	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL	42-5	UPPER ISMAY	SAN JUAN	SENE	05	039S	025E	43-037-3126100	83687U6890	10655
KIVA (UPPER ISMAY)	NAVAJO FEDERAL (W/W)	42-9	WINGATE/CUTLER	SAN JUAN	SENE	09	039S	025E	43-037-3126300	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL	9-1	UPPER ISMAY	SAN JUAN	NWNE	09	039S	025E	43-037-3100100	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL (W/W)	4-1	ISMAY	SAN JUAN	SESW	04	039S	025E	43-037-3111200	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL (W/W)	43-5	ISMAY	SAN JUAN	NWSW	05	039S	025E	43-037-3131700	83687U6890	09975
MON MESA	HATCH POINT FEDERAL	27-1A	CANE CREEK	SAN JUAN	NESW	27	027S	021E	43-037-3051800	8910184250	02815

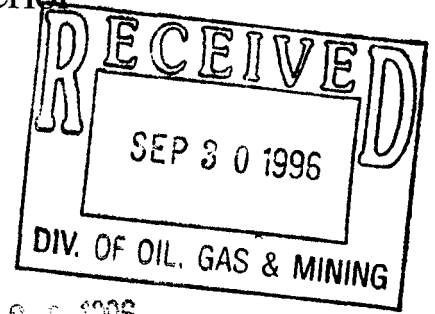




United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155



In Reply Refer To
3100
SL-071010C
(UT-932)

SEP 26 1996

NOTICE

Burlington Resources Oil & Gas Company	:	Oil and Gas
801 Cherry Street, Suite 900	:	SL-071010C
Fort Worth, Texas 76102	:	

Corporate Name Change Recognized

Acceptable evidence has been filed in this office concerning the corporate name change from Meridian Oil Inc. to Burlington Resources Oil & Gas Company.

For our purposes, the name change is recognized effective July 12, 1996, the date the Secretary of State of Delaware certified the name change.

The oil and gas lease files identified on the enclosed exhibit have been noted as to the name change. We are notifying the Minerals Management Service and all applicable Bureau of Land Management offices of the change by a copy of this notice. If additional documentation for changes of operator are required by our field offices, you will be contacted by them.

A rider to Bond No. 400IA9059 (BLM Bond No. MT0719) has been accepted by the Montana State office as of September 16, 1996, its date of receipt. The rider changed the name on the bond from Meridian Oil Inc. to Burlington Resources Oil & Gas Company.

ROBERT LOPEZ

Robert Lopez
Group Leader,
Minerals Adjudication Group

Enclosure

Exhibit (1 p)

cc: MMS, Data Management Division, P.O. Box 5860, MS 3113, Denver, Colorado 80217
Moab District Office
Vernal District Office

bc: State of Utah, ATTN: Lisha Cordova, Division of Oil, Gas and Mining, P.O. Box 145801,
Salt Lake City, Utah 84114-5801
Teresa Thompson (UT-931)
Irene Anderson (UT-932)

Exhibit of Leases Affected

SL-071010C	U-8894A	U-40751	U-61752
SL-071595	U-8895A	U-45051	U-62143
U-0681	U-8897A	U-45929	U-62190
U-0683	U-15202	U-46825	U-63181
U-0684	U-15203	U-51045	UTU-64930
U-0685	U-15204	U-51046	UTU-64931
U-0719	U-16962A	U-51047	UTU-65329
U-0725	U-17024	U-52333	UTU-65607
U-0737	U-17623	U-56186	UTU-65750
U-0741	U-19281	U-56932	UTU-65751
U-0744	U-20016	U-56933	UTU-65868 (ROW)
U-03333	U-20895	U-56934	UTU-65940
U-04049	U-24606	U-57895	UTU-65943
U-04049A	U-39832	U-58728	UTU-66025
U-05059	U-40361	U-60428	UTU-66487
U-08107	U-40440	U-60520	UTU-66584
U-062420	U-40544 (ROW)	U-61556	UTU-66708
UTU-66830	UTU-66831	UTU-67565	UTU-67568
UTU-67569	UTU-67570	UTU-68232	UTU-68664
UTU-68676	UTU-69434	UTU-70115 (ROW)	UTU-70196
UTU-72660	U-60786X (Bannock Unit)	U-63089X (East Mountain Unit)	

OPERATOR CHANGE WORKSHEET

Attach all documentation received by the division regarding this change.

Initial each listed item when completed. Write N/A if item is not applicable.

1-EC	6-EC
2-GLH	7-KDR
3-DTS	8-SJ
4-VLD	9-FILE
5-RJF	

☒ Change of Operator (~~well sold~~)☐ Designation of Agent☐ Designation of Operator☒ Operator Name Change ~~Only~~The operator of the well(s) listed below has changed, effective: 7-11-96TO: (new operator) BURLINGTON RESOURCES O&G CO.(address) 3300 N "A" ST BLDG 6MIDLAND TX 79710-1810EILEEN DANNI DEYPhone: (915) 688-6800Account no. N7670FROM: (old operator) MERIDIAN OIL INC(address) PO BOX 3209ENGLEWOOD CO 80155-3209EILEEN DANNI DEYPhone: (303) 930-9393Account no. N7230

WELL(S) attach additional page if needed:

***KACHINA, KIVA, EAST MOUNTAIN, BANNOCK UNIT'S**

Name: **SEE ATTACHED**	API: _____	Entity: _____	S	T	R	Lease: _____
Name: _____	API: _____	Entity: _____	S	T	R	Lease: _____
Name: _____	API: _____	Entity: _____	S	T	R	Lease: _____
Name: _____	API: _____	Entity: _____	S	T	R	Lease: _____
Name: _____	API: _____	Entity: _____	S	T	R	Lease: _____
Name: _____	API: _____	Entity: _____	S	T	R	Lease: _____
Name: _____	API: _____	Entity: _____	S	T	R	Lease: _____

OPERATOR CHANGE DOCUMENTATION

- See 1. (r649-8-10) Sundry or other legal documentation has been received from the **FORMER** operator (attach to this form). (Rec'd 9-13-96)
- See 2. (r649-8-10) Sundry or other legal documentation has been received from the **NEW** operator (Attach to this form). (Rec'd 9-13-96)
- See 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is the company registered with the state? (yes/no) ____ If yes, show company file number: #096593. (Eff. 1-29-82)
- See 4. **FOR INDIAN AND FEDERAL WELLS ONLY.** The BLM has been contacted regarding this change. Make note of BLM status in comments section of this form. BLM approval of **Federal** and **Indian** well operator changes should ordinarily take place prior to the division's approval, and before the completion of steps 5 through 9 below.
- See 5. Changes have been entered in the Oil and Gas Information System (3270) for each well listed above. (i.e. UIC Program) (10-3-96)
- See 6. Cardex file has been updated for each well listed above. (10-3-96)
- See 7. Well file labels have been updated for each well listed above. (10-3-96)
- See 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to Trust Lands, Sovereign Lands, UGS, Tax Commission, etc. (10-3-96)
- See 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

- See 1. (r649-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) no If entity assignments were changed, attach copies of Form 6, Entity Action Form.
- N/A 2. Trust Lands, Sovereign Lands, Tax Commission, etc., have been notified through normal procedures of entity changes.

BOND VERIFICATION - (FEE WELLS ONLY)

* 961002 "Rider" 80,000 to Burlington rec'd by Trust Lands Admin.

- See 1. (r649-3-1) The NEW operator of any fee lease well listed above has furnished a proper bond.
- N/A 2. A copy of this form has been placed in the new and former operator's bond files.
- N/A 3. The FORMER operator has requested a release of liability from their bond (yes/no) no, as of today's date 11/14/96. If yes, division response was made to this request by letter dated 11/14/96.

LEASE INTEREST OWNER NOTIFICATION OF RESPONSIBILITY

- N/A 1. Copies of documents have been sent on 11/14/96 to OTIS at Trust Lands for changes involving State leases, in order to remind that agency of their responsibility to review for proper bonding.

FILMING

- VB 1. All attachments to this form have been microfilmed. Today's date: 12-27-96.

FILING

1. Copies of all attachments to this form have been filed in each well file.
2. The original of this form, and the original attachments are now being filed in the Operator Change file.

COMMENTS

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

MARALENE SPAWN
BURLINGTON RESOURCES O&G
3300 N A ST BLDG 6
MIDLAND TX 79710-1810

UTAH ACCOUNT NUMBER: N7670

REPORT PERIOD (MONTH/YEAR): 4 / 97

AMENDED REPORT ☐ (Highlight Changes)

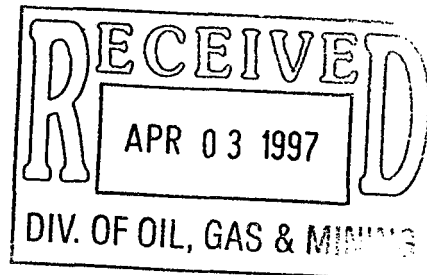
Well Name API Number Entity Location	Producing Zone	Well Status	Days Oper	Production Volumes		
				OIL(BBL)	GAS(MCF)	WATER(BBL)
INDIAN CREEK #1 4301530082 02585 17S 06E 2	FRSD			ml 27626		
INDIAN CREEK 10176-5 4301530117 02585 17S 06E 10	FRSD			U15203	E mtn. Unit	
INDIAN CREEK UNIT 021762-3 4301530175 02585 17S 06E 2	FRSD			U15204		
13-35 EMU HRE FEDERAL 4301530230 02585 16S 06E 35	FRSD			U56933		
E MOUNTAIN UNIT 32-23 4301530231 02585 16S 06E 23	FRSD			U17024		
NAVAJO FEDERAL 9-1 4303731001 09975 39S 25E 9	ISMY			U52333		
AJO FEDERAL 4-2 4303731161 09975 39S 25E 4	ISMY			U52333	Kival (Upper Ismay)	
NAVAJO FEDERAL #4-4 4303731179 09975 39S 25E 4	ISMY			U52333		
24-4 KIVA FEDERAL 4303731745 09975 39S 25E 4	ISMY			U52333		
NAVAJO FEDERAL 42-5 4303731261 10655 39S 25E 5	ISMY			U58728		
BANNOCK-FEDERAL 21-33 4303731425 10923 38S 24E 33	ISMY			U40361	Bannock Unit	
TOTALS						

REMARKS:

I hereby certify that this report is true and complete to the best of my knowledge.
Date: _____
Signature: _____
Telephone Number: _____

MERIT ENERGY COMPANY

12222 MERIT DRIVE, SUITE 1500
DALLAS, TEXAS 75251
(972) 701-8377
(972) 960-1252 Fax



April 2, 1997

Utah Division of Oil, Gas and Mining
Attn: Ms. Lisha Cordova
1594 West North Temple
Suite 1210
Salt Lake City, Utah 84114

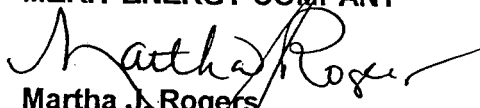
RE: Change of Operator to Merit Energy Company
Emery and San Juan County

Dear Ms. Cordova:

Enclosed please find a copy of Form 3160 executed by both parties, Merit Energy and Burlington Resources.

If additional information or forms are required to process this transaction, please contact me at 972-701-8377.

Yours very truly,
MERIT ENERGY COMPANY


Martha J. Rogers
Manager, Regulatory Affairs

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or re-entry to a different reservoir.
Use "APPLICATION FOR PERMIT-" for such proposals.

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

MERIT ENERGY COMPANY

3. Address and Telephone No (972) 701-8377

12222 MERIT DRIVE, DALLAS, TX 75251

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

300' FSL & 2225' FEL, SWSE

04 039S 025E, SLM

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
83687U6890

8. Well Name and No.

NAVAJO FEDERAL 4-2

9. API Well No.

43,037,3116100

10. Field and Pool, or Exploratory Area

KIVA (UPPER ISMAY), ISMAY

11. County or Parish, State

SAN JUAN, UT

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☐ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☒ Other CHANGE OF
OPERATOR

☐ Change of Plans

☐ New Construction

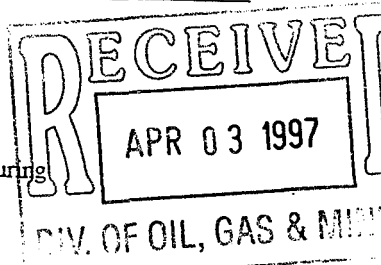
☐ Non-Routine Fracturing

☐ Water Shut-Off

☐ Conversion to Injection

☐ Dispose Water

(Note: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)



13. Described Proposed or Completed Operations (Clearly state all pertinent details and give pertinent dates including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

EFFECTIVE AS OF JANUARY 1, 1997, BURLINGTON RESOURCES OIL & GAS COMPANY, THE PRIOR OPERATOR OF RECORD, TRANSFERRED ALL RIGHT, TITLE AND INTEREST IN THE NAVAJO FEDERAL 4-2 WELL TO MERIT PARTNERS, L.P. (AS TO 92.4%) AND MERIT ENERGY PARTNERS III, L.P. (AS TO 7.6%), C/O MERIT ENERGY COMPANY, 12222 MERIT DRIVE, DALLAS, TX 75251. ON APRIL 1, 1997, MERIT ENERGY COMPANY, THE GENERAL PARTNER FOR MERIT PARTNERS, L.P. AND MERIT ENERGY PARTNERS III, L.P., WILL TAKE OVER PHYSICAL OPERATIONS OF SAID WELL ON BEHALF OF SAID LIMITED PARTNERSHIPS AND IS CONSIDERED TO BE THE OPERATOR OF SAID WELL AS OF THAT DATE.

MERIT ENERGY COMPANY IS RESPONSIBLE UNDER THE TERMS AND CONDITIONS OF THE LEASE FOR THE OPERATIONS CONDUCTED UPON THE LEASED LANDS. BOND COVERAGE IN THE AMOUNT OF \$150,000 FOR MERIT ENERGY COMPANY IS PROVIDED UNDER BLM BOND NO. WY3011, IN FAVOR OF THE BUREAU OF LAND MANAGEMENT, U. S. DEPARTMENT OF THE INTERIOR.

14. I hereby certify that the foregoing is true and correct.

Signed Martha Rogers Title Manager, Regulatory Affairs Date March 31, 1997

(This space for Federal or State office use)

Approved By _____ Title _____ Date _____
Condition of Approval, If any: _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or re-entry to a different reservoir.
Use "APPLICATION FOR PERMIT-" for such proposals.

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

BURLINGTON RESOURCES OIL & GAS COMPANY

3. Address and Telephone No (915)688-6800

P. O. BOX 51810, MIDLAND, TX 79710-1810

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

300' FSL & 2225' FEL, SWSE

04 039S 025E, SLM

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
83687U6890

8. Well Name and No.
NAVAJO FEDERAL 4-2

9. API Well No.
43,037,3116100

10. Field and Pool, or Exploratory Area
KIVA (UPPER ISMAY), ISMAY

11. County or Parish, State
SAN JUAN, UT

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☐ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☒ Other CHANGE OF
OPERATOR

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut-Off

☐ Conversion to Injection

☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Described Proposed or Completed Operations (Clearly state all pertinent details and give pertinent dates including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

EFFECTIVE JANUARY 1, 1997, BURLINGTON RESOURCES OIL & GAS COMPANY, THE OPERATOR OF RECORD OF THE NAVAJO FEDERAL 4-2 WELL, TRANSFERRED ALL OF ITS RIGHT, TITLE AND INTEREST IN SAID WELL TO MERIT PARTNERS, L.P. (AS TO 92.4%) AND MERIT ENERGY PARTNERS III, L.P. (AS TO 7.6%), C/O MERIT ENERGY COMPANY, 12222 MERIT DRIVE, DALLAS, TX 75251.

ON APRIL 1, 1997, MERIT ENERGY COMPANY, GENERAL PARTNER FOR MERIT PARTNERS, L.P. AND MERIT ENERGY PARTNERS III, L.P., WILL TAKE OVER PHYSICAL OPERATIONS OF SAID WELL ON BEHALF OF SAID LIMITED PARTNERSHIPS.

14. I hereby certify that the foregoing is true and correct.

Signed

Kent Beers

Title

Attorney-in-Fact

Date

March 31, 1997

(This space for Federal or State office use)

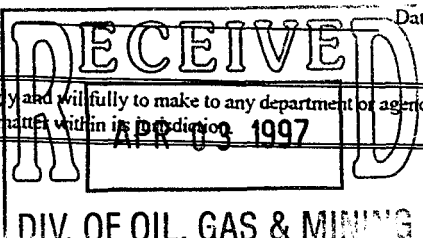
Approved By

Condition of Approval, If any:

Title

Date

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statement or representations as to any matter within its jurisdiction.



CHANGE OF OPERATOR STATE OF - UT

COUNTY	FIELD NAME	WELL NAME	STR	LSE#	WELLTYPE	APIWELL	COMM NO.	FED CNTRL	ST CNTRL
EMERY	EAST MOUNTAIN ,FERRON	EAST MOUNTAIN FEDERAL 13-35	35 016S 006E	ML-27626	GAS WELL	43,015,3023000	UT060P49-87U69	57287U6920	025 <i>1156293</i>
EMERY	EAST MOUNTAIN ,FERRON	EAST MOUNTAIN FEDERAL 32-23	23 016S 006E		GAS WELL	43,015,3023100	UT060P49-87U69	57287U6920	025 <i>117624</i>
EMERY	FERRON ,FERRON	INDIAN CREEK 021762 3	02 017S 006E	ML-27626	GAS WELL	43,015,3017500		57287U6920	025 <i>115324</i>
EMERY	FERRON ,FERRON	INDIAN CREEK 1	02 017S 006E	ML-27626	GAS WELL	43,015,3008200		57287U6920	025 <i>115202</i>
EMERY	FERRON ,FERRON	INDIAN CREEK 10176 5	10 017S 006E	ML-27626	GAS WELL	43,015,3011700		57287U6920	025 <i>115203</i>
EMERY	FERRON ,FERRON	INDIAN CREEK 14176 1	14 017S 006E	UTU15202	GAS WELL	43,015,3009100		UTU15202	109 <i>115202</i>
SAN JUAN	BANNOCK ,ISMAY	BANNOCK FEDERAL 21-33	33 038S 024E	UTU60786	OIL WELL	43,037,3142500	60786A	UTU60786A	109 <i>1146361</i>
SAN JUAN	KACHINA ,CUTLER	WASH UNIT 2	13 038S 023E	UTU20894	WATER SOURCE	43,037,3132400		UTU20894	106 <i>1120294 (To Data Rights 4-7-97)</i>
SAN JUAN	KACHINA ,ISMAY	ARABIAN FEDERAL 2	19 038S 024E	UTU56186	WATER INJECTED	43,037,3128200		UTU56186	106 <i>1156186</i>
SAN JUAN	KACHINA ,ISMAY	HAVASU FEDERAL 11-19	19 038S 024E	UTU56186	WATER INJECTED	43,037,3145800		UTU56186	106 <i>1156186</i>
SAN JUAN	KACHINA ,ISMAY	HAVASU FEDERAL 12-19	19 038S 024E	UTU56186	OIL WELL	43,037,3145700		UTU56186	106 <i>1156186</i>
SAN JUAN	KACHINA ,ISMAY	HAVASU FEDERAL 12-19A	19 038S 024E	UTU56186	OIL WELL	43,037,3145900		UTU56186	106 <i>1156186</i>
SAN JUAN	KACHINA ,ISMAY	HAVASU FEDERAL 22-19	19 038S 024E	UTU56186	OIL WELL	43,037,3127800		UTU56186	106 <i>1156186</i>
SAN JUAN	KACHINA ,ISMAY	HAVASU FEDERAL 41-24	24 038S 023E	UTU20895	OIL WELL	43,037,3127900		UTU20895	106 <i>1120895</i>
SAN JUAN	KACHINA ,ISMAY	HAVASU FEDERAL 42-24	24 038S 023E	UTU20895	WATER INJECTED	43,037,3129800		UTU20895	106 <i>1120895</i>

CHANGE OF OPERATOR STATE OF - UT

COUNTY	FIELD NAME	WELL NAME	STR	LSE#	WELLTYPE	APIWELL	COMM NO.	FED CNTRL	ST CNTRL
SAN JUAN	KACHINA ,ISMAY-DESERT CREEK	ARABIAN FEDERAL 3	19 038S 024E	UTU58186	OIL WELL	43,037,3128700		UTU58186	106 <i>456186</i>
SAN JUAN	KIVA (UPPER ISMAY) ,CUTLER	NAVAJO FEDERAL 42-9	09 039S 025E	U-52333	WATER SOURCE	43,037,3126300			
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	KIVA FEDERAL 24-4	04 039S 025E		OIL WELL	43,037,3174500		83687U6890	099 <i>452333 (To water Rights 4797)</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL (WIW) 4-1	04 039S 025E		WATER INJECTED	43,037,3111200		83687U6890	099 <i>USA-452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL (WIW) 43-5	04 039S 025E		WATER INJECTED	43,037,3131700		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 12-4	04 039S 025E		WATER INJECTED	43,037,3139500		83687U6890	099 <i>458728</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 14-4	04 039S 025E		WATER INJECTED	43,037,3132100		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 21-9	09 039S 025E		WATER INJECTED	43,037,3126700		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 23-4	04 039S 025E		WATER INJECTED	43,037,3125900		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 4-1	04 039S 025E		OIL WELL	43,037,3111200		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 4-2	04 039S 025E		OIL WELL	43,037,3116100		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 4-4	04 039S 025E		OIL WELL	43,037,3117900		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 42-5	05 039S 025E		OIL WELL	43,037,3126100		83687U6890	106 <i>458728</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 43-5	04 039S 025E		OIL WELL	43,037,3131700		83687U6890	099 <i>458728</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 9-1	09 039S 025E		OIL WELL	43,037,3100100		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,WINGATE	NAVAJO FEDERAL 42-9	09 039S 025E		WATER SOURCE	43,037,3126300		83687U6890	099 <i>452333 (To water Rights 4797)</i>

CHANGE OF OPERATOR STATE OF - UT

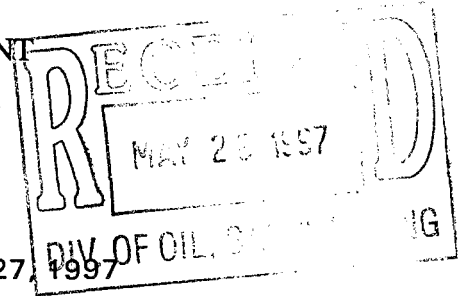
COUNTY	FIELD NAME	WELL NAME	STR	LSE#	WELLTYPE	APIWELL	COMM NO.	FED CNTRL	ST CNTRL
SAN JUAN	KIVA ,DESERT CREEK	NAVAJO FEDERAL 41-5	05 039S 025E	UTU57895	OIL WELL	43,037,3135800		UTU57895	108 <i>1157895</i>
SAN JUAN	LION MESA ,CANE CREEK	HATCH POINT FEDERAL 27-1A	27 027S 021E	UTU20016	OIL WELL	43,037,3051800		UTU20016	028 <i>1120016</i>



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155



May 27, 1997

Merit Energy Company
12222 Merit Drive, Suite 1500
Dallas, Texas 75251

Re: Kiva (Upper Ismay) Unit
San Juan County, Utah

Gentlemen:

On May 21, 1997, we received an indenture dated April 1, 1997, whereby Burlington Resources Oil and Gas Company resigned as Unit Operator and Merit Energy Company was designated as Successor Unit Operator for the Kiva (Upper Ismay) Unit, San Juan County, Utah.

The indenture was approved by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective May 27, 1997. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under Kiva (Upper Ismay) Unit Agreement.

Your nationwide (Wyoming) oil and gas bond No. 3011 will be used to cover all operations within the Kiva (Upper Ismay) Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks
Chief, Branch of Fluid Minerals

Enclosure

bcc: District Manager - Moab (w/enclosure)
Division of Oil, Gas & Mining
Minerals Adjudication Group U-932
File - Kiva (Upper Ismay) Unit (w/enclosure)
MMS - Data Management Division
Agr. Sec. Chron
Fluid Chron

U-931:TAThompson:tt:5/27/97

Well Status Report
Utah State Office
Bureau of Land Management

Lease Api Number Well Name QTR Section Township Range Well Status Operator

** Inspection Item: 83687U6890

✓UTU52333	4303731395	12-4 NAVAJO-FEDERAL	SWNW	4	T39S	R25E	WIW	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731321	14-4 NAVAJO FED	SWSW	4	T39S	R25E	WIW	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731267	21-9 NAVAJO-FEDERAL	NENW	9	T39S	R25E	WIW	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731259	23-4 NAVAJO-FEDERAL	NESW	4	T39S	R25E	WIW	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731745	24-4 KIVAL FEDERAL	SESW	4	T39S	R25E	POW	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731112	4-1 NAVAJO FEDERAL	SESW	4	T39S	R25E	WIW	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731161	4-2 NAVAJO FEDERAL	SWSE	4	T39S	R25E	POW	BURLINGTON RESOURCES O + G CO
UTU52333	4303731176	4-3 NAVAJO FEDERAL	NESW	4	T39S	R25E	P+A	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731179	4-4 NAVAJO FEDERAL	NWSW	4	T39S	R25E	POW	BURLINGTON RESOURCES O + G CO
✓UTU58728	4303731261	42-5 NAVAJO-FEDERAL	SENE	5	T39S	R25E	POW	BURLINGTON RESOURCES O + G CO
UTU52333	4303731263	42-9 NAVAJO-FEDERAL	SENE	9	T39S	R25E	WSW	BURLINGTON RESOURCES O + G CO
✓UTU58728	4303731317	43-5 NAVAJO (BH 5)	NWSW	4	T39S	R25E	OSI	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731001	9-1 NAVAJO FEDERAL	NWNE	9	T39S	R25E	POW	BURLINGTON RESOURCES O + G CO

OPERATOR CHANGE WORKSHEET

Attach all documentation received by the division regarding this change.

Initial each listed item when completed. Write N/A if item is not applicable.

Routing	
1- <i>[initials]</i>	6- <i>[initials]</i>
2- <i>[initials]</i>	7- KAS <i>[initials]</i>
3- <i>[initials]</i>	8- SI <i>[initials]</i>
4- VLD <i>[initials]</i>	9- FILE <i>[initials]</i>
5- JRB <i>[initials]</i>	

☒ Change of Operator (well sold)☐ Designation of Agent☐ Designation of Operator☐ Operator Name Change OnlyThe operator of the well(s) listed below has changed, effective: 4-1-97

TO: (new operator) MERIT ENERGY COMPANY
 (address) 12222 MERIT DR STE 1500
DALLAS TX 75251
MARTHA ROGERS
 Phone: (972) 701-8377
 Account no. N4900 (4-30-97)

FROM: (old operator) BURLINGTON RESOURCES O&G
 (address) 3300 N A ST BLDG 6
MIDLAND TX 79710-1810
MARALENE SPAWN
 Phone: (915) 688-6800
 Account no. N7670

WELL(S) attach additional page if needed:

*KIVA (UPPER ISMAY) UNIT

Name: **SEE ATTACHED**	API: <u>43-037-31161</u>	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____

OPERATOR CHANGE DOCUMENTATION

- Lec* 1. (r649-8-10) Sundry or other legal documentation has been received from the FORMER operator (attach to this form). *(4-3-97) *LIC 4-21-97*
- Lec* 2. (r649-8-10) Sundry or other legal documentation has been received from the NEW operator (Attach to this form). *(4-3-97) *LIC 4-21-97*
- N/A* 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is the company registered with the state? (yes/no) ____ If yes, show company file number: ____ **Kachina Unit chgd 4-30-97.*
- Lec* 4. FOR INDIAN AND FEDERAL WELLS ONLY. The BLM has been contacted regarding this change. Make note of BLM status in comments section of this form. BLM approval of Federal and Indian well operator changes should ordinarily take place prior to the division's approval, and before the completion of steps 5 through 9 below.
- Lec* 5. Changes have been entered in the Oil and Gas Information System (3270) for each well listed above. *(5-30-97) *LIC DBASE E. Quattro*
- Lec* 6. Cardex file has been updated for each well listed above. *(5-30-97)*
- Lec* 7. Well file labels have been updated for each well listed above. *(5-30-97)*
- Lec* 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to Trust Lands, Sovereign Lands, UGS, Tax Commission, etc. *(5-30-97)*
- Lec* 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

- Yes 1. (r649-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) ____ If entity assignments were changed, attach copies of Form 6, Entity Action Form.
10655 to 9975 (Kiva Upper Ismay) entity.
- Yes 2. Trust Lands, Sovereign Lands, Tax Commission, etc., have been notified through normal procedures of entity changes.

BOND VERIFICATION - (FEE WELLS ONLY)

- N/A 1. (r649-3-1) The NEW operator of any fee lease well listed above has furnished a proper bond.
- ____ 2. A copy of this form has been placed in the new and former operator's bond files.
- ____ 3. The FORMER operator has requested a release of liability from their bond (yes/no) ____, as of today's date _____. If yes, division response was made to this request by letter dated _____.

LEASE INTEREST OWNER NOTIFICATION OF RESPONSIBILITY

- N/A 1. Copies of documents have been sent on _____ to _____ at Trust Lands for changes involving State leases, in order to remind that agency of their responsibility to review for proper bonding.
- N/A 2. (r649-2-10) The former operator of any fee lease wells listed above has been contacted and informed by letter dated _____ 19 ____, of their responsibility to notify all interest owners of this change.

FILMING

- Yes 1. All attachments to this form have been microfilmed. Today's date: 6.20.97.

FILING

- ____ 1. Copies of all attachments to this form have been filed in each well file.
- ____ 2. The original of this form, and the original attachments are now being filed in the Operator Change file.

COMMENTS

970430 Kachina Unit Op. Chg. Aprv. & changed. (separate change)
970530 Kiva Unit Op. chg. Aprv. 5-27-97.

(East Mtn. Unit & Bannock Unit Not Aprv. Yet - See separate chg.)
when aprv.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: See attached
2. NAME OF OPERATOR: Merit Energy Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 12222 Merit Dr., Suite _____ CITY Dallas STATE TX ZIP 75251		7. UNIT or CA AGREEMENT NAME: See attached
4. LOCATION OF WELL FOOTAGES AT SURFACE: See Attached		8. WELL NAME and NUMBER: See attached
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: _____		9. API NUMBER:
COUNTY: San Juan		10. FIELD AND POOL, OR WILDCAT: See attached
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Merit Energy Company advises, effective SEPT. 30, 2000, Journey Operating, L.L.C. will become the operator of the wells on the attached list.

Journey Operating, L.L.C.
1201 Louisiana, Suite 1040
Houston, TX. 77002
(713) 655-0595

By: Brian A. Baer
Brian A. Baer, President

RECEIVED
OCT 20 2000
DIVISION OF
OIL, GAS AND MINING

NAME (PLEASE PRINT) <u>Arlene Valliquette</u>	TITLE <u>Manager - Regulatory Affairs</u>
SIGNATURE <u>Arlene Valliquette</u>	DATE <u>9/29/00</u>

(This space for State use only)

CHANGE OF OPERATOR
from Merit Energy Company to Journey Operating, L.L.C.
San Juan County, Utah

Attachment to Utah Form 19

Well Type	Lease Serial No.	Field Name	Well Name/Number	API Number	Location of Well
Oil Well	UTU-40361	Bannock	Bannock Federal #21-33	43-037-31425	NE NW (685' FNL & 1520' FWL) Sec. 33-T38S-R24E
Injection Well	I-149-IND-9123	Ismay	Ismay Flodine Park R-124	43-037-16169	NE NE (660' FNL & 660' FEL) Sec. 24-T40S-R25E
Oil Well	14-20-603-2055-A	Ismay	Ismay Flodine Park S-216	43-037-15546	SW NW (1820' FNL & 500' FWL) Sec. 16-T40S-R26E
Injection Well	14-20-603-2055-A	Ismay	Ismay Flodine Park T-316	43-037-16462	NE SW (1980' FSL & 1980' FWL) Sec. 16-T40S-R26E
Oil Well	14-20-603-2055-A	Ismay	Ismay Flodine Park S-416	43-037-15544	SW SW (1820' FNL & 500' FWL) Sec. 16-T40S-R26E
Oil Well	14-20-603-2055-A	Ismay	Ismay Flodine Park U-416	43-037-15545	SW SE (660' FSL & 1980' FEL) Sec. 16-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park T-117	43-037-16456	NE NW (775' FNL & 1995' FWL) Sec. 17-T40S-R26E
Oil Well	I-149-IND-9124	Ismay	Ismay Flodine Park S-217	43-037-16170	SW NW (1980' FNL & 660' FWL) Sec. 17-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park V-117	43-037-16188	NE NE (660' FNL & 660' FEL) Sec. 17-T40S-R26E
Oil Well	I-149-IND-9124	Ismay	Ismay Flodine Park U-217	43-037-16180	SW NE (1980' FNL & 1820' FEL) Sec. 17-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park T-317	43-037-16463	NE SW (1980' FSL & 1980' FWL) Sec. 17-T40S-R26E
Oil Well	I-149-IND-9124	Ismay	Ismay Flodine Park U-417	43-037-16185	SW SE (500' FSL & 1820' FEL) Sec. 17-T40S-R26E
Injection Well	I-149-IND-9123	Ismay	Ismay Flodine Park T-118	43-037-16457	NE NW (660' FNL & 1980' FWL) Sec. 18-T40S-R26E
Oil Well	I-149-IND-9123	Ismay	Ismay Flodine Park S-218	43-037-16171	SW NW (1820' FNL & 660' FWL) Sec. 18-T40S-R26E
Oil Well	I-149-IND-9123	Ismay	Ismay Flodine Park T-318	43-037-16464	NE SE (1980' FSL & 1980' FWL) Sec. 18-T40S-R26E
Oil Well	I-149-IND-9123	Ismay	Ismay Flodine Park V-318	43-037-16467	NE SE (1980' FSL & 660' FEL) Sec. 18-T40S-R26E
Oil Well	I-149-IND-9123	Ismay	Ismay Flodine Park U-418	43-037-16186	SW SE (660' FSL & 1980' FEL) Sec. 18-T40S-R26E
Injection Well	I-149-IND-9123	Ismay	Ismay Flodine Park T-119	43-037-16458	NE NW (660' FNL & 1980' FWL) Sec. 19-T40S-R26E
Water Source Well	I-149-IND-9123	Ismay	Ismay Flodine Park V-219	43-037-16519	SE NE (1980' FNL & 560' FEL) Sec. 19-T40S-R26E
Oil Well	I-149-IND-9124	Ismay	Ismay Flodine Park V-120	43-037-16190	NE NE (660' FNL & 660' FEL) Sec. 20-T40S-R26E
Water Source Well	I-149-IND-9124	Ismay	Ismay Flodine Park V-220	43-037-20055	SE NE (1950' FNL & 1120' FEL) Sec. 20-T40S-R26E
Oil Well	I-149-IND-9124	Ismay	Ismay Flodine Park S-121	43-037-31629	NW NW (500' FNL & 660' FWL) Sec. 21-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park T-121	43-037-16460	NE NW (610' FNL & 2050' FWL) Sec. 21-T40S-R26E
Water Source Well	I-149-IND-9124	Ismay	Ismay Flodine Park U-121	43-037-20056	NW NE (540' FNL & 1980' FEL) Sec. 21-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park V-121	43-037-16191	NE NE (660' FNL & 660' FEL) Sec. 21-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park U-421	43-037-11267	SW SE (660' FSL & 1980' FEL) Sec. 21-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park V-321	43-037-16194	NE SE (1980' FSL & 670' FEL) Sec. 21-T40S-R26E

CHANGE OF OPERATOR
from Merit Energy Company to Journey Operating, L.L.C.
San Juan County, Utah

Attachment to Utah Form 19

Well Type	Lease Serial No.	Field Name	Well Name/Number	API Number	Location of Well
Oil Well	I-149-IND-9124	Ismay	Ismay Flodine Park S-222	43-037-16173	SW NW (2030' FNL & 820' FWL) Sec. 22-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park T-322	43-037-16179	NE SW (1820' FSL & 1935' FWL) Sec. 22-T40S-26E
Oil Well	I-149-IND-9124	Ismay	Ismay Flodine Park U-422	43-037-16187	SW SE (820' FSL & 2140' FEL) Sec. 22-T40S-R26E
Oil Well	NOG-9904-1324	Ismay	Ismay Flodine Park S-227	43-037-16231	SW NW (2140' FNL & 820' FWL) Sec. 27-T40S-R26E
Oil Well	NOG-9904-1324	Ismay	Ismay Flodine Park U-127	43-037-31648	NE NE (745' FNL & 595' FEL) Sec. 27-T40S-R26E
Oil Well	NOG-9904-1324	Ismay	Ismay Flodine Park U-227	43-037-16234	SW NE (2120' FNL & 1950' FEL) Sec. 27-T40S-R26E
Oil Well	14-20-603-2058-A	Ismay	Ismay Flodine Park U-234	43-037-16184	SW NE (1980' FNL & 2080' FEL) Sec. 34-T40S-R26E
Water Source Well	UTU-20894	Kachina	Wash Unit #2	43-037-31324	SE SE (470' FSL & 850' FEL) Sec. 13-T38S-R23E
Oil Well	UTU-20895	Kachina	Havasus Federal #41-24	43-037-31279	NE NE (1050' FNL & 500' FEL) Sec. 24-T38S-R23E
Injection Well	UTU-20895	Kachina	Havasus Federal #42-24	43-037-31298	SE NE (1970' FNL & 461' FEL) Sec. 24-T38S-R23E
Injection Well	UTU-56186	Kachina	Arabian Federal #2	43-037-31282	NW SW (2180' FSL & 950' FWL) Sec. 19-T38S-R24E
Oil Well	UTU-56186	Kachina	Arabian Federal #3	43-037-31287	NE SW (1470' FSL & 1750' FWL) Sec. 19-T38S-R24E
Injection Well	UTU-56186	Kachina	Havasus Federal #11-19	43-037-31458	NW NW (940' FNL & 590' FWL) Sec. 19-T38S-R24E
Oil Well	UTU-56186	Kachina	Havasus Federal #12-19	43-037-31457	SW NW (1840' FNL & 410' FWL) Sec. 19-T38S-R24E
Oil Well	UTU-56186	Kachina	Havasus Federal #12-19A	43-037-31459	SW NW (2520' FNL & 200' FWL) Sec. 19-T38S-R24E
Oil Well	UTU-56186	Kachina	Havasus Federal #22-19	43-037-31278	SW NW (1850' FNL & 1255' FWL) Sec. 19-T38S-R24E
Injection Well	UTU-52333	Kiva	Navajo Federal #12-4	43-037-31395	SW NW (2260' FNL & 440' FWL) Sec. 4-T39S-R25E
Injection Well	UTU-52333	Kiva	Navajo Federal #14-4	43-037-31321	SW SW (1150' FSL & 1110' FWL) Sec. 4-T39S-R25E
Injection Well	UTU-52333	Kiva	Navajo Federal #23-4	43-037-31259	NE SW (1500' FSL & 2500' FWL) Sec. 4-T39S-R25E
Oil Well	UTU-52333	Kiva	Kiva Federal #24-4	43-037-31745	SE SW (1057' FSL & 1997' FWL) Sec. 4-T39S-R25E
Injection Well	UTU-52333	Kiva	Navajo Federal #4-1	43-037-31112	SE SW (370' FSL & 1940' FWL) Sec. 4-T39S-R25E
Oil Well	UTU-52333	Kiva	Navajo Federal #4-2	43-037-31161	SW SE (300' FSL & 2225' FEL) Sec. 4-T39S-R25E
Oil Well	UTU-52333	Kiva	Navajo Federal #4-4	43-037-31179	NW SW (1980' FSL & 660' FWL) Sec. 4-T39S-R25E
Oil Well	UTU-57895	Kiva	Navajo Federal #42-5	43-037-31261	SE NE (2130' FNL & 320' FEL) Sec. 5-T39S-R25E
Injection Well	UTU-58728	Kiva	Navajo Federal #43-5	43-037-31317	NE SE (1954' FSL & 627' FEL) Sec. 5-T39S-R25E
Oil Well	UTU-52333	Kiva	Navajo Federal #9-1	43-037-31001	NW NE (770' FNL & 2010' FEL) Sec. 9-T39S-R25E

CHANGE OF OPERATOR
from Merit Energy Company to Journey Operating, L.L.C.
San Juan County, Utah

Attachment to Utah Form 19

Well Type	Lease Serial No.	Field Name	Well Name/Number	API Number	Location of Well
● Injection Well	UTU-52333	Kiva	Navajo Federal #21-9	43-037-31267	NE NW (330' FNL & 2510' FWL) Sec. 9-T39S-R25E
Water Source Well	UTU-52333	Kiva	Navajo Federal #42-9	43-037-31263	SE NE (1850' FNL & 1140' FEL) Sec. 9-T39S-R25E



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

IN REPLY REFER TO
UT-931

January 4, 2001

Journey Operating, L.L.C.
Attn: Sandra Meche
Louisiana Place
1201 Louisiana Street
Houston, Texas 77002

Re: Kiva (Upper Ismay) Unit
San Juan County, Utah

Gentlemen:

We received an indenture dated September 30, 2000, whereby Merit Energy Company resigned as Unit Operator and Journey Operating, L.L.C. was designated as Successor Unit Operator for the Kiva (Upper Ismay) Unit, San Juan County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective January 4, 2001. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Kiva (Upper Ismay) Unit Agreement.

Your nationwide (Wyoming) oil and gas bond No. 3354 will be used to cover all operations within the Kiva (Upper Ismay) Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks
Chief, Branch of Fluid Minerals

Enclosure

bcc: Field Manager - Moab (w/enclosure)
Division of Oil, Gas & Mining
Minerals Adjudication Group U-932
File - Kiva (Upper Ismay) Unit (w/enclosure)
MMS - Data Management Division
Agr. Sec. Chron
Fluid Chron

UT931:TAThompson:tt:1/4/01

Results of query for MMS Account Number 83687U6890

API Number	Operator	Well Name	Well Status	Lease or CA Number	Inspection Item	Township	Range	Section	Quarter/Quarter	Field Name	Production Zo
4303731001	MERIT ENERGY COMPANY	9-1 NAVAJO FEDERAL	POW	UTU52333	83687U6890	39S	25E	9	NWNE	KIVA	ISMAY
4303731112	MERIT ENERGY COMPANY	4-1 NAVAJO FEDERAL	WIW	UTU52333	83687U6890	39S	25E	4	SESW	KIVA	DESERT CREE
4303731161	MERIT ENERGY COMPANY	4-2 NAVAJO FEDERAL	POW	UTU52333	83687U6890	39S	25E	4	SWSE	KIVA	ISMAY
4303731176	MERIT ENERGY COMPANY	4-3 NAVAJO FEDERAL	P+A	UTU52333	83687U6890	39S	25E	4	NESW	KIVA	
4303731179	MERIT ENERGY COMPANY	4-4 NAVAJO FEDERAL	POW	UTU52333	83687U6890	39S	25E	4	NWSW	KIVA	ISMAY
4303731259	MERIT ENERGY COMPANY	23-4 NAVAJO-FEDERAL	TA	UTU52333	83687U6890	39S	25E	4	NESW	KIVA	ISMAY-DESER CREEK
4303731261	MERIT ENERGY COMPANY	42-5 NAVAJO-FEDERAL	POW	UTU58728	83687U6890	39S	25E	5	SENE	KIVA	ISMAY
4303731263	MERIT ENERGY COMPANY	42-9 NAVAJO-FEDERAL	WSW	UTU52333	83687U6890	39S	25E	9	SENE	KIVA	
4303731267	MERIT ENERGY COMPANY	21-9 NAVAJO-FEDERAL	WIW	UTU52333	83687U6890	39S	25E	9	NENW	KIVA	ISMAY

4303731317	MERIT ENERGY COMPANY	43-5 NAVAJO (BH 5)	OSI	UTU58728	83687U6890	39S	25E	4	NWSW	KIVA	ISMAY
4303731321	MERIT ENERGY COMPANY	14-4 NAVAJO FED	WIW	UTU52333	83687U6890	39S	25E	4	SWSW	KIVA	ISMAY
4303731395	MERIT ENERGY COMPANY	12-4 NAVAJO-FEDERAL	WIW	UTU52333	83687U6890	39S	25E	4	SWNW	KIVA	ISMAY
4303731745	MERIT ENERGY COMPANY	24-4 KIVAL FEDERAL	POW	UTU52333	83687U6890	39S	25E	4	SESW	KIVA	ISMAY

DISCLAIMER for online data: No warranty is made by the BLM for use of the data for purposes not intended by the BLM.

OPERATOR CHANGE WORKSHEET

ROUTING

1. GLH		4-KAS	<input checked="" type="checkbox"/>
2. CDW		5- STO	<input checked="" type="checkbox"/>
3. JLT		6-FILE	

Enter date after each listed item is completed

X Change of Operator (Well Sold)

Designation of Agent

Operator Name Change (Only)

Merger

The operator of the well(s) listed below has changed, effective: **9-30-2000****FROM:** (Old Operator):

MERIT ENERGY COMPANY

Address: 12222 MERIT DR.

DALLAS, TX 75251

Phone: 1-(972)-701-8377

Account N4900

TO: (New Operator):

JOURNEY OPERATING LLC

Address: 1201 LOUISIANA, SUITE 1040

HOUSTON, TX 77002

Phone: 1-(713)-655-0595

Account N1435

CA No.

Unit: KIVA (UPPER ISMAY)

WELL(S)

NAME	API NO.	ENTITY NO.	SEC. TWN RNG	LEASE TYPE	WELL TYPE	WELL STATUS
NAVAJO FEDERAL 4-1	43-037-31112	9975	04-39S-25E	FEDERAL	WI	A
NAVAJO FEDERAL 12-4	43-037-31395	10864	04-39S-25E	FEDERAL	WI	A
NAVAJO FEDERAL 14-4	43-037-31321	10780	04-39S-25E	FEDERAL	WI	A
NAVAJO FEDERAL 23-4	43-037-31259	9975	04-39S-25E	FEDERAL	WI	A
NAVAJO FEDERAL 43-5	43-037-31317	9975	05-39S-25E	FEDERAL	WI	A
NAVAJO FEDERAL 21-9	43-037-31267	10759	09-39S-25E	FEDERAL	WI	A
KIVA FEDERAL 24-4	43-037-31745	9975	04-39S-25E	FEDERAL	OW	P
NAVAJO FEDERAL 4-2	43-037-31161	9975	04-39S-25E	FEDERAL	OW	P
NAVAJO FEDERAL 4-4	43-037-31179	9975	04-39S-25E	FEDERAL	OW	P
NAVAJO FEDERAL 42-5	43-037-31261	9975	05-39S-25E	FEDERAL	OW	P
NAVAJO FEDERAL 9-1	43-037-31001	9975	09-39S-25E	FEDERAL	OW	P
NAVAJO FEDERAL 42-9	43-037-31263	99998	09-39S-25E	FEDERAL	WSW	I

OPERATOR CHANGES DOCUMENTATION

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 10/23/2000
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 10/23/2000
3. The new company has been checked through the **Department of Commerce, Division of Corporations Database** on: 01/05/2001

4. Is the new operator registered in the State of Utah: YES Business Number: 4822566-0161
5. If **NO**, the operator was contacted on: _____
6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the (merger, name change, or operator change for all wells listed on Federal or Indian leases on: 01/04/2001
7. **Federal and Indian Units:** The BLM or BIA has approved the successor of unit operator for wells listed on: 01/04/2001
8. **Federal and Indian Communization Agreements ("CA"):** The BLM or the BIA has approved the operator change for all wells listed involved in a CA on: N/A
9. **Underground Injection Control ("UIC") Pro;** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 01/08/2001

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database** on: 01/05/2001
2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 01/05/2001
3. Bond information entered in RBDMS on: N/A
4. Fee wells attached to bond in RBDMS on: N/A

STATE BOND VERIFICATION:

1. State well(s) covered by Bond No.: N/A

FEE WELLS - BOND VERIFICATION/LEASE INTEREST OWNER NOTIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed has furnished a bond: N/A
2. The **FORMER** operator has requested a release of liability from their bond on: N/A
The Division sent response by letter on: N/A
3. (R649-2-10) The **FORMER** operator of the Fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

FILMING:

1. All attachments to this form have been **MICROFILMED** on: 2-21-01

FILING:

1. **ORIGINALS/COPIES** of all attachments pertaining to each individual well have been filled in each well file on: _____

COMMENTS:

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

ROUTING	
1. DJJ	
2. CDW	

X Change of Operator (Well Sold)

Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective:

6/9/2006

FROM: (Old Operator): N1435-Journey Operating, LLC 201 Louisiana, Suite 1040 Houston, TX 77002 Phone: 1 (713) 655-0595	TO: (New Operator): N0265-Citation Oil & Gas Corp 8223 Willow Place South Houston, TX 77070 Phone: 1 (281) 517-7800
---	---

CA No.				Unit:	KIVA			
WELL NAME	SEC TWN RNG			API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
NAVAJO FEDERAL 9-1	09	390S	250E	4303731001	9975	Federal	OW	P
NAVAJO FED 4-1	04	390S	250E	4303731112	9975	Federal	WI	A
NAVAJO FEDERAL 4-2	04	390S	250E	4303731161	9975	Federal	OW	S
NAVAJO FEDERAL 4-4	04	390S	250E	4303731179	9975	Federal	OW	P
NAVAJO FED 23-4	04	390S	250E	4303731259	9975	Federal	WI	I
NAVAJO FEDERAL 42-5	05	390S	250E	4303731261	9975	Federal	OW	S
NAVAJO FEDERAL 42-9	09	390S	250E	4303731263	9975	Federal	WS	A
NAVAJO FED 21-9	09	390S	250E	4303731267	9975	Federal	WI	A
NAVAJO FED 43-5	04	390S	250E	4303731317	9975	Federal	WI	A
NAVAJO FED 14-4	04	390S	250E	4303731321	9975	Federal	WI	A
NAVAJO FED 12-4	04	390S	250E	4303731395	9975	Federal	WI	A
24-4 KIVA FEDERAL	04	390S	250E	4303731745	9975	Federal	OW	P

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 6/23/2006
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 6/23/2006
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: _____
- Is the new operator registered in the State of Utah: YES Business Number: 793304-0143
- (R649-9-2) Waste Management Plan has been received on: IN PLACE
- Inspections of LA PA state/fee well sites complete on: n/a
- Reports current for Production/Disposition & Sundries on: ok
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 7/6/2006 BIA
- Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: 7/6/2006
- Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: n/a
- Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 6/30/2006

DATA ENTRY:

- Changes entered in the **Oil and Gas Database** on: 7/31/2006
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 7/31/2006
- Bond information entered in RBDMS on: n/a
- Fee/State wells attached to bond in RBDMS on: n/a
- Injection Projects to new operator in RBDMS on: 7/31/2006
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

BOND VERIFICATION:

- Federal well(s) covered by Bond Number: 104061650
- Indian well(s) covered by Bond Number: 104061656

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER:

See Attached List

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

See Attached List

8. WELL NAME and NUMBER:

See Attached List

9. API NUMBER:

See Attach

10. FIELD AND POOL, OR WILDCAT:

See Attached List

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL

OIL WELL ☐GAS WELL ☐

OTHER _____

2. NAME OF OPERATOR:

Journey Operating, L.L.C.

N 1435

3. ADDRESS OF OPERATOR:

1201 Louisiana, Suite 1040

CITY Houston

STATE TX

ZIP 77002

PHONE NUMBER:

(713) 655-0595

4. LOCATION OF WELL

FOOTAGES AT SURFACE: See Attached List

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

STATE:

UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Journey Operating, L.L.C. advises, effective June 9, 2006, Citation Oil & Gas Corp. will become the operator of the wells on the attached list.

Citation Oil & Gas Corp. (N0265)
8223 Willow Place South
Houston, TX 77070
(281) 517-7800
Bond No.: 104325628 - \$120,000

BLM BOND = 104061650
BIA BOND = 104061656

By: Robert T. Kennedy
Robert T. Kennedy
Sr. Vice President Land

NAME (PLEASE PRINT) Brian A. Baer

TITLE President

SIGNATURE

Brian A. Baer

DATE 6/9/2006

(This space for State use only)

APPROVED 7/13/12006

Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

(5/2000)

(Instructions on Reverse Side)

RECEIVED

JUN 23 2006

DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:

UTU-52333

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

8. WELL NAME and NUMBER:

Navajo Federal 4-2

9. API NUMBER:

4303731161

10. FIELD AND POOL, OR WILDCAT:

Kiva

1. TYPE OF WELL

OIL WELL ☒

GAS WELL ☐

OTHER

2. NAME OF OPERATOR:

Citation Oil & Gas Corp.

3. ADDRESS OF OPERATOR:

P O Box 690688

CITY

Houston

STATE

TX

ZIP

77269

PHONE NUMBER:

(281) 517-7186

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 300' FSL & 2225' FEL

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 4 39S 25E

STATE:

UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

☒ NOTICE OF INTENT
(Submit in Duplicate)

Approximate date work will start:

☐ ACIDIZE

☐ ALTER CASING

☒ CASING REPAIR

☐ CHANGE TO PREVIOUS PLANS

☐ CHANGE TUBING

☐ CHANGE WELL NAME

☐ CHANGE WELL STATUS

☐ COMMINGLE PRODUCING FORMATIONS

☐ CONVERT WELL TYPE

☐ DEEPEN

☐ FRACTURE TREAT

☐ NEW CONSTRUCTION

☐ OPERATOR CHANGE

☐ PLUG AND ABANDON

☐ PLUG BACK

☒ PRODUCTION (START/RESUME)

☐ RECLAMATION OF WELL SITE

☐ RECOMPLETE - DIFFERENT FORMATION

☐ REPERFORATE CURRENT FORMATION

☐ SIDETRACK TO REPAIR WELL

☐ TEMPORARILY ABANDON

☐ TUBING REPAIR

☐ VENT OR FLARE

☐ WATER DISPOSAL

☐ WATER SHUT-OFF

☐ OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Citation Oil and Gas Corp. requests approval to locate and repair an anticipated casing leak and return the well to production with attached procedure.

COPY SENT TO OPERATOR

Date: 6/24/2008

Initials: KS

NAME (PLEASE PRINT) Bridget Lisenbe

TITLE Permitting Analyst

SIGNATURE

Bridget Lisenbe

DATE 5/29/2008

(This space for State use only)

Accepted by the
Utah Division of
Oil, Gas and Mining

Date: 6/25/08

By: *Dustin*

Federal Approval Of This
Action Is Necessary

(See Instructions on Reverse Side)

RECEIVED

JUN 02 2008

DIV. OF OIL, GAS & MINING

**RTP Procedure
Kiva Navajo #4-2
Kiva Field
San Juan, UT
(May 2008)**

OBJECTIVE:

PULL RODS AND TUBING AND ATTEMPT TO RETURN WELL TO PRODUCTION

CURRENT CONDITION: WELL SHUT-IN SINCE SEPTEMBER 2004

PROPOSED PROCEDURE:

1. Hot water down tbg to clean & kill. MIRUSU. ND wellhead and NU BOP.
2. POOH w/rods (9/13/04 pull rod broke above pump)
3. Try pulling TBG (9/13/04 tbg stuck)
4. RU WL and free point TBG
5. Backoff TBG above anchor. POOH w/tbg
6. Pickup 4" washpipe and wash over to top of anchor @ 5471'
7. Pickup overshot and POOH w/ anchor and TBG
8. Scanlog TBG tripping in well. TIH w/production assembly and RTP

** Notify Houston for apparent casing leak for further instructions.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-52333
2. NAME OF OPERATOR: Citation Oil & Gas Corp.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: P O Box 690688 CITY Houston STATE TX ZIP 77269		7. UNIT or CA AGREEMENT NAME:
4. LOCATION OF WELL FOOTAGES AT SURFACE: 300' FSL & 2225' FEL		8. WELL NAME and NUMBER: Navajo Federal 4-2
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 4 39S 25E		9. API NUMBER: 4303731161
COUNTY: San Juan		10. FIELD AND POOL, OR WILDCAT: Kiva
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/> PRODUCTION (START/RESUME) <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	<input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUT-OFF <input type="checkbox"/> OTHER: _____
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: 6/8/2008			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Citation requested permission to repair a casing leak in the referenced well and return it to production. Citation did not find a casing leak but did find and replace damaged tubing. This well was returned to production 6/8/2008.

NAME (PLEASE PRINT) <u>Bridget Lisenbe</u>	TITLE <u>Permitting Analyst</u>
SIGNATURE <u>Bridget Lisenbe</u>	DATE <u>8/13/2008</u>

(This space for State use only)

RECEIVED

AUG 19 2008

DIV. OF OIL, GAS & MINING

CITATION OIL AND GAS CORPORATION WELLBORE DIAGRAM AND INFORMATION

Well Name:	<u>Kiva Navajo 4-2</u>	Field:	<u>Kiva</u>
Date:	<u>02/18/2008</u>	Location:	<u>SW SE Sec.4, T39S R25E</u>
County:	<u>San Juan</u>	State:	<u>Utah</u>

Surface:	SW NE Sec. 4 T39S R25E San Juan County, UT
Completed:	09/06/85
Elevation:	4864'
KB:	4864'
API #:	43-037-31161

15" hole

14" 32.23# set a 92'
Cmt/d w/24 sks

12 1/4" hole

TOC @ 1500'

8 5/8" K-55 to 2999'

1st stage: 482 sks Class B' 65/35 Poz with 6% gel, 1/4 # flocele/sk. 2% calcium chloride and 1% D-59
2nd stage: 362 sks Class 'B' 65/35 Poz w/6% gel, 1/4 # flocele/sk. 2% calcium chloride and 1% D-59

tbg anchor @ 5471'

Perforations:

Stimulations/treatment:

5524-36' (12')	5,000 gal 15% San-1 Acid
5539'-43' (4')	
5546'-51' (5')	28,000 gal 28% San-1 Acid
5557'-68' (11')	
5571'-82' (11')	30,000 gals 40# gel
5585'-92' (7')	
5595'-97' (2')	2,770 gal Flush

5 1/2" cement retainer @ 5701'

5753-58' (5')	} 13,000 gals 28% San-2 Acid & 19,512 gal. 40# Gel. Flushed w/4000 gal. water
5761-63' (2')	
5766'	

TESTED
WATER

PBTD @ 5803'

5 1/2" K-55 to 5825'. Cemented w/710 sks Class 'B' 65/35 Poz
w/ 6% gel followed by 150 sks Class 'B' with 1% D-60 flac

TD @ 5825'

TUBING DETAIL

Qty	Description	Length	Depth
1	KB	10.00	10.00
178	2-7/8" 6.5# J-55 EUE	5,461.30	5,471.30
1	TBG Anchor	3.00	5,474.30
	4 jts as above	125.04	5,599.34
	Seating Nipple	1.10	5,600.44
	TBG Anchor	4.03	5,604.47
	1 Jt as Above	31.26	5,635.73
	Bull Plug	0.50	5,636.23

CASING DETAIL

Size	Weight	Grade	Depth
14"	32.23 #		92'
8 5/8"	32 & 24#	K-55	2999'
5 1/2"	15.5#	K-55	5825'



RICHARDSON OPERATING COMPANY

4725 S. Monaco Street, Suite 200
Denver, Colorado 80237
(303) 830-8000 Fax (303) 830-8009

RECEIVED

AUG 02 2013

DIV. OF OIL, GAS & MINING

July 29, 2013

Attn: Zeke Clements
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Re: Sundry Notices and Reports on Wells - Change of Operator and Transfers of Authority to Inject

Dear Zeke:

Enclosed for approval by the Utah Division of Oil, Gas and Mining, please find two originally executed Sundry Notices and Reports on Wells on Form 9, for the following 18 leases and wells (API # included):

<u>Lease #</u>	<u>Well Name</u>	<u>API Well No.</u>
UTU-20894	Wash Unit 2	43-037-31324 ✓
UTU-20895	Havasus-Federal 41-24	43-037-31279 ✓
UTU-20895	Havasus-Federal 42-24	43-037-31298 ✓
UTU-40361	Bannock -Fed 21-33	43-037-31425 ✓
UTU-52333	24-4 Kiva Federal	43-037-31745 ✓
UTU-52333	Navajo Federal 12-4	43-037-31395 ✓
UTU-52333	Navajo Federal 14-4	43-037-31321 ✓
UTU-52333	Navajo Federal 21-9	43-037-31267 ✓
UTU-52333	Navajo Federal 4-1	43-037-31112 ✓
UTU-52333	Navajo Federal 4-2	43-037-31161 ✓
UTU-52333	Navajo Federal 42-9	43-037-31263 ✓
UTU-52333	Navajo Federal 4-4	43-037-31179 ✓
UTU-52333	Navajo Federal 9-1	43-037-31001 ✓
UTU-56185	Arabian Federal 3	43-037-31287 ✓
UTU-56186	Havasus-Federal 11-19	43-037-31458 ✓
UTU-56186	Havasus-Federal 22-19	43-037-31278 ✓
UTU-58728	Navajo Federal 42-5	43-037-31261 ✓
UTU-58728	Navajo Federal 43-5	43-037-31317 ✓

APPROVED

AUG 19 2013

DIV. OIL GAS & MINING
BY: Raehee Medina

Also enclosed for the approval by the Utah Division of Oil, Gas and Mining, please find one originally executed Transfer of Authority to Inject on Form UIC Form 5 for the following seven wells:

<u>Lease #</u>	<u>Well Name</u>	<u>API Well No.</u>
UTU-20895	Havasus-Federal 42-24	43-037-31298 ✓
UTU-52333	Navajo Federal 12-4	43-037-31395 ✓
UTU-52333	Navajo Federal 14-4	43-037-31321 ✓
UTU-52333	Navajo Federal 21-9	43-037-31267 ✓
UTU-52333	Navajo Federal 4-1	43-037-31112 ✓
UTU-56186	Havasus-Federal 11-19	43-037-31458 ✓
UTU-58728	Navajo Federal 43-5	43-037-31317 ✓

Please return the approved documents for each well to:

Richardson Operating Company
4725 S. Monaco Street, Suite 200,
Denver, Colorado 80237.

If you have any questions, please do not hesitate to contact me at the number above or via email at land@richardsonoil.com.

Sincerely,



Ann Barthrop
Senior Land Analyst

Enclosures

RECEIVED
AUG 02 2013
Div. of Oil, Gas & Mining

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET (for state use only)

ROUTING

CDW

X - Change of Operator (Well Sold)

Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective:

4/1/2013

FROM: (Old Operator): N0265-Citation Oil & Gas Corp P O BOX 690688 Houston, TX. 77269 Phone: 1 (281) 891-1000	TO: (New Operator): N2400-Richardson Operating Co. 4725 S Monaco Street, Suite 200 Denver, CO. 80237 Phone: 1 (303)830-8000
--	---

CA No.				Unit:	Kiva(Upper Mesa)			
WELL NAME	SEC TWN RNG			API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
See Attached List								

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 8/2/2013
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 8/2/2013
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 8/26/2013
- a. Is the new operator registered in the State of Utah: Business Number: 8776630-0143
- a. (R649-9-2) Waste Management Plan has been received on: N/A
- b. Inspections of LA PA state/fee well sites complete on: N/A
- c. Reports current for Production/Disposition & Sundries on: 8/19/2013
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM Not Yet BIA N/A
- Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: Not Yet
- Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: Not Yet
- Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to **Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 8/7/2013

DATA ENTRY:

- Changes entered in the **Oil and Gas Database** on: 8/26/2013
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 8/26/2013
- Bond information entered in RBDMS on: 8/26/2013
- Fee/State wells attached to bond in RBDMS on: N/A
- Injection Projects to new operator in RBDMS on: 8/26/2013
- Receipt of Acceptance of Drilling Procedures for APD/New on: N/A

BOND VERIFICATION:

- Federal well(s) covered by Bond Number: RLB0002500
- Indian well(s) covered by Bond Number: N/A
- a. (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number N/A
- b. The **FORMER** operator has requested a release of liability from their bond on: N/A

LEASE INTEREST OWNER NOTIFICATION:

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

COMMENTS:

Citation Oil & Gas Corp (N0265) to Richardson Operating Co. (N2400)
Effective 1-April-2013

Well Name	Sec.	Township	Range	API No.	Utah Entity No.	Mineral Lease Type	Well Type	Well Status	Unit Name
NAVAJO FEDERAL 9-1	09	390S	250E	4303731001	9975	Federal	Oil Well	Producing	KIVA (UPPER MESA)
NAVAJO FED 4-1	04	390S	250E	4303731112	9975	Federal	Water Injection	Active	KIVA (UPPER MESA)
NAVAJO FEDERAL 4-2	04	390S	250E	4303731161	9975	Federal	Oil Well	Producing	KIVA (UPPER MESA)
NAVAJO FEDERAL 4-4	04	390S	250E	4303731179	9975	Federal	Oil Well	Producing	KIVA (UPPER MESA)
NAVAJO FEDERAL 42-5	05	390S	250E	4303731261	9975	Federal	Oil Well	Producing	KIVA (UPPER MESA)
NAVAJO FEDERAL 42-9	09	390S	250E	4303731263	9975	Federal	Water Source	Active	KIVA (UPPER MESA)
NAVAJO FED 21-9	09	390S	250E	4303731267	9975	Federal	Water Injection	Active	KIVA (UPPER MESA)
NAVAJO FED 43-5	04	390S	250E	4303731317	9975	Federal	Water Injection	Active	KIVA (UPPER MESA)
NAVAJO FED 14-4	04	390S	250E	4303731321	9975	Federal	Water Injection	Active	KIVA (UPPER MESA)
NAVAJO FED 12-4	04	390S	250E	4303731395	9975	Federal	Water Injection	Plugged	KIVA (UPPER MESA)
24-4 KIVA FEDERAL	04	390S	250E	4303731745	9975	Federal	Oil Well	Producing	KIVA (UPPER MESA)

RECEIVED

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AUG 02 2013

FORM 9

Div. of Oil, Gas & Mining

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Change of Operator</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: Federal TU-52333
2. NAME OF OPERATOR: Richardson Operating Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
3. ADDRESS OF OPERATOR: 4725 S Monaco St. Suite 200 CITY Denver STATE CO ZIP 80237		7. UNIT or CA AGREEMENT NAME: NA
PHONE NUMBER: (303) 830-8000		8. WELL NAME and NUMBER: NAVAJO FEDERAL 4-2
4. LOCATION OF WELL FOOTAGES AT SURFACE: 300 S 2225 E		9. API NUMBER: 037-31161
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 4 39S 25E		10. FIELD AND POOL, OR WILDCAT: KIVA
COUNTY: SAN JUAN		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Citation Oil & Gas Corp. has sold the captioned well to Richardson Operating Company and requests that they be named as Operator of Record effective 4/1/2013

Please release this well from coverage under Citation Oil & Gas Corp.'s Utah Statewide Bond # 104325628.

On behalf of Citation Oil & Gas Corp. I hereby certify that the foregoing is true and correct:

Sharon Ward Permitting Manager: Sharon Ward Date: 4/1/2013

By execution of this document, Richardson Operating Company requests the State of Utah to approve them as Operator of Record for the above captioned well and accepts responsibility for this well under it's Statewide Oil and Gas Lease Bond in favor of the United States Department of the Interior, Bureau of Land Management Bond # RLB0002500.

On behalf of Richardson Operating Company, I hereby certify that the foregoing is true and correct:	
NAME (PLEASE PRINT) <u>David B. Richardson, Jr.</u>	TITLE <u>President</u>
SIGNATURE <u>D-B. Richardson</u>	DATE <u>7-29-2013</u>

(This space for State use only)



RICHARDSON OPERATING COMPANY

4725 S. Monaco Street, Suite 200
Denver, Colorado 80237
(303) 830-8000 Fax (303) 830-8009

RECEIVED

AUG 02 2013

DIV. OF OIL, GAS & MINING

July 29, 2013

Attn: Zeke Clements
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Re: Sundry Notices and Reports on Wells - Change of Operator and Transfers of Authority to Inject

Dear Zeke:

Enclosed for approval by the Utah Division of Oil, Gas and Mining, please find two originally executed Sundry Notices and Reports on Wells on Form 9, for the following 18 leases and wells (API # included):

<u>Lease #</u>	<u>Well Name</u>	<u>API Well No.</u>
UTU-20894	Wash Unit 2	43-037-31324 ✓
UTU-20895	Havasu-Federal 41-24	43-037-31279 ✓
UTU-20895	Havasu-Federal 42-24	43-037-31298 ✓
UTU-40361	Bannock -Fed 21-33	43-037-31425 ✓
UTU-52333	24-4 Kiva Federal	43-037-31745 ✓
UTU-52333	Navajo Federal 12-4	43-037-31395 ✓
UTU-52333	Navajo Federal 14-4	43-037-31321 ✓
UTU-52333	Navajo Federal 21-9	43-037-31267 ✓
UTU-52333	Navajo Federal 4-1	43-037-31112 ✓
UTU-52333	Navajo Federal 4-2	43-037-31161 ✓
UTU-52333	Navajo Federal 42-9	43-037-31263 ✓
UTU-52333	Navajo Federal 4-4	43-037-31179 ✓
UTU-52333	Navajo Federal 9-1	43-037-31001 ✓
UTU-56185	Arabian Federal 3	43-037-31287 ✓
UTU-56186	Havasu-Federal 11-19	43-037-31458 ✓
UTU-56186	Havasu-Federal 22-19	43-037-31278 ✓
UTU-58728	Navajo Federal 42-5	43-037-31261 ✓
UTU-58728	Navajo Federal 43-5	43-037-31317 ✓

APPROVED

AUG 19 2013

DIV. OIL GAS & MINING
BY: Raehee Medina

Also enclosed for the approval by the Utah Division of Oil, Gas and Mining, please find one originally executed Transfer of Authority to Inject on Form UIC Form 5 for the following seven wells:

<u>Lease #</u>	<u>Well Name</u>	<u>API Well No.</u>
UTU-20895	Havasus-Federal 42-24	43-037-31298 ✓
UTU-52333	Navajo Federal 12-4	43-037-31395 ✓
UTU-52333	Navajo Federal 14-4	43-037-31321 ✓
UTU-52333	Navajo Federal 21-9	43-037-31267 ✓
UTU-52333	Navajo Federal 4-1	43-037-31112 ✓
UTU-56186	Havasus-Federal 11-19	43-037-31458 ✓
UTU-58728	Navajo Federal 43-5	43-037-31317 ✓

Please return the approved documents for each well to:

Richardson Operating Company
4725 S. Monaco Street, Suite 200,
Denver, Colorado 80237.

If you have any questions, please do not hesitate to contact me at the number above or via email at land@richardsonoil.com.

Sincerely,



Ann Barthrop
Senior Land Analyst

Enclosures

RECEIVED
AUG 02 2013
Div. of Oil, Gas & Mining

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET (for state use only)

ROUTING

CDW

X - Change of Operator (Well Sold)

Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective:

4/1/2013

FROM: (Old Operator):

N0265-Citation Oil & Gas Corp

P O BOX 690688

Houston, TX. 77269

Phone: 1 (281) 891-1000

TO: (New Operator):

N2400-Richardson Operating Co.

4725 S Monaco Street, Suite 200

Denver, CO. 80237

Phone: 1 (303)830-8000

CA No.				Unit:	Kiva(Upper Mesa)			
WELL NAME	SEC TWN RNG			API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
See Attached List								

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 8/2/2013
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 8/2/2013
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 8/26/2013
- a. Is the new operator registered in the State of Utah: Business Number: 8776630-0143
- 5a. (R649-9-2) Waste Management Plan has been received on: N/A
- 5b. Inspections of LA PA state/fee well sites complete on: N/A
- 5c. Reports current for Production/Disposition & Sundries on: 8/19/2013
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM Not Yet BIA N/A
- Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: Not Yet
- Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: Not Yet
- Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to **Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 8/7/2013

DATA ENTRY:

- Changes entered in the **Oil and Gas Database** on: 8/26/2013
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 8/26/2013
- Bond information entered in RBDMS on: 8/26/2013
- Fee/State wells attached to bond in RBDMS on: N/A
- Injection Projects to new operator in RBDMS on: 8/26/2013
- Receipt of Acceptance of Drilling Procedures for APD/New on: N/A

BOND VERIFICATION:

- Federal well(s) covered by Bond Number: RLB0002500
- Indian well(s) covered by Bond Number: N/A
- 3a. (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number N/A
- 3b. The **FORMER** operator has requested a release of liability from their bond on: N/A

LEASE INTEREST OWNER NOTIFICATION:

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

COMMENTS:

Citation Oil & Gas Corp (N0265) to Richardson Operating Co. (N2400)
Effective 1-April-2013

Well Name	Sec.	Township	Range	API No.	Utah Entity No.	Mineral Lease Type	Well Type	Well Status	Unit Name
NAVAJO FEDERAL 9-1	09	390S	250E	4303731001	9975	Federal	Oil Well	Producing	KIVA (UPPER MESA)
NAVAJO FED 4-1	04	390S	250E	4303731112	9975	Federal	Water Injection	Active	KIVA (UPPER MESA)
NAVAJO FEDERAL 4-2	04	390S	250E	4303731161	9975	Federal	Oil Well	Producing	KIVA (UPPER MESA)
NAVAJO FEDERAL 4-4	04	390S	250E	4303731179	9975	Federal	Oil Well	Producing	KIVA (UPPER MESA)
NAVAJO FEDERAL 42-5	05	390S	250E	4303731261	9975	Federal	Oil Well	Producing	KIVA (UPPER MESA)
NAVAJO FEDERAL 42-9	09	390S	250E	4303731263	9975	Federal	Water Source	Active	KIVA (UPPER MESA)
NAVAJO FED 21-9	09	390S	250E	4303731267	9975	Federal	Water Injection	Active	KIVA (UPPER MESA)
NAVAJO FED 43-5	04	390S	250E	4303731317	9975	Federal	Water Injection	Active	KIVA (UPPER MESA)
NAVAJO FED 14-4	04	390S	250E	4303731321	9975	Federal	Water Injection	Active	KIVA (UPPER MESA)
NAVAJO FED 12-4	04	390S	250E	4303731395	9975	Federal	Water Injection	Plugged	KIVA (UPPER MESA)
24-4 KIVA FEDERAL	04	390S	250E	4303731745	9975	Federal	Oil Well	Producing	KIVA (UPPER MESA)

RECEIVED

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AUG 02 2013

FORM 9

Div. of Oil, Gas & Mining

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Change of Operator</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: Federal TU-52333
2. NAME OF OPERATOR: Richardson Operating Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
3. ADDRESS OF OPERATOR: 4725 S Monaco St. Suite 200 CITY Denver STATE CO ZIP 80237		7. UNIT or CA AGREEMENT NAME: NA
PHONE NUMBER: (303) 830-8000		8. WELL NAME and NUMBER: NAVAJO FEDERAL 4-2
4. LOCATION OF WELL FOOTAGES AT SURFACE: 300 S 2225 E		9. API NUMBER: 037-31161
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 4 39S 25E		10. FIELD AND POOL, OR WILDCAT: KIVA
COUNTY: SAN JUAN		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Citation Oil & Gas Corp. has sold the captioned well to Richardson Operating Company and requests that they be named as Operator of Record effective 4/1/2013

Please release this well from coverage under Citation Oil & Gas Corp.'s Utah Statewide Bond # 104325628.

On behalf of Citation Oil & Gas Corp. I hereby certify that the foregoing is true and correct:

Sharon Ward Permitting Manager: Sharon Ward Date: 4/1/2013

By execution of this document, Richardson Operating Company requests the State of Utah to approve them as Operator of Record for the above captioned well and accepts responsibility for this well under it's Statewide Oil and Gas Lease Bond in favor of the United States Department of the Interior, Bureau of Land Management Bond # RLB0002500.

On behalf of Richardson Operating Company, I hereby certify that the foregoing is true and correct:	
NAME (PLEASE PRINT) <u>David B. Richardson, Jr.</u>	TITLE <u>President</u>
SIGNATURE <u>D-B. Richardson</u>	DATE <u>7-29-2013</u>

(This space for State use only)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.
UTU-52333

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Richardson Operating Company

3a. Address
4725 S. Monaco St. Ste. 200 Denver, CO 80237

3b. Phone No. (include area code)
(303)830-8000

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
T: 39S R: 25E S: 4 SW SE
Lat: 37.4188 Long: -109.17626

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No.
Navajo Federal 4-2

9. API Well No.
~~43-037-31745~~ 43-037-31161

10. Field and Pool or Exploratory Area
Kiva

11. County or Parish, State
Garfield County, UT

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input checked="" type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

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SEP 08 2016
DIV. OF OIL, GAS & MINING

The intent of the sundry is to notify that the Navajo Federal 4-2 has been returned to a producing status as of June 2nd, 2016.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Cody Niehus

Title Geo Tech / Operations

Signature



Date 08/16/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)